

LACKENBY ENVIRONMENTAL STATEMENT

VOLUME 3: TECHNICAL APPENDICES
APPENDICES TO CHAPTER 1
(CUMULATIVE EFFECTS)

Lackenby, South Tees

Volume 3: Appendices

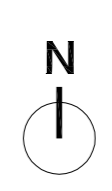
Chapter L: Cumulative Effects

December 2020

Appendix L1: Cumulative Sites Plan and Site Location Plans

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REV | BY | DATE | NOTE



KEY

-  Development Site: 35.8 ha / 88.5 acres
-  Other Land in Applicants Control



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**SOUTH TEES, REDCAR
LACKENBY**

LOCATION PLAN

CLIENT:	STDC	STATUS:	PLANNING
SCALE:	1:10,000	DATE:	12:20
SHEET SIZE:	A1	DWN BY:	MEC
CHECKED BY:		REVISION:	MEC

PROJECT NO: 1401-TM
DRAWING NO: LK-SD-00.02
REVISION: -



- Key**
- Site Boundary
 - Tier 1 Sites
 - Tier 2 Sites
6. Eston Road
 7. Low Grange Farm
 8. Kirkleatham Business Park/Kirkleatham Lane (Outline)
 9. Kirkleatham Business Park/Kirkleatham Lane (Reserved Matters)
 10. Dogger Bank Windfarm (Offshore)
 11. Teeside Combined Cycle Power Plan (CCPP)
 12. Wilton International Complex
 13. Teesport, Grangetown
 14. York Potash DCO
 15. York Potash Outline
 16. York Potash - Wilton International Complex
 17. York Potash - Woodsmith
 18. Lianhetch, Seal Sands
 19. Tofts Road West, Graythorp, Hartlepool
 20. Regent Cinema
 21. South Bank
 22. South Bank, Marine Side
 23. Metals Recovery Area
 24. Redcar Bulk Terminal
 25. Grangetown prairie (ERF)

0 1 2 km
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LICHFIELDS

Project	Lackenby
Title	Cumulative Sites
Client	South Tees Development Corporation
Date	07.12.2020
Scale	1 : 75,000 @ A4
Drawn by	MAR
Drg. No	GIS\LF62682\03-04

GIS Reference: S:\LF Jobs\LF62682 - Teesworks Outline Applications\LF62682-03 - Teesworks Outline Applications - Lackenby - Cumulative Sites - 03.12.2020.mxd



Appendix L2: Phasing Schedule

Teesworks Development Sites: Phasing Schedule

Please note, all figures have been converted to sqm and rounded to the nearest whole number

Development Site	2022	2023	2024	2025
DORMAN POINT	24,154	41,806	11,148	13,471
LACKENBY				
STEEL HOUSE (LAND)				
LONG ACRES		18,581	34,374	
THE FOUNDRY	35,303		24,155	55,742
Total	59,457	60,387	69,677	69,213

Office (B1) (Steel House, plus 10% of all other floorspace)	104,052
Industrial (B2/B8)	794,319

2026	2027	2028	2029	2030	2031	2032	2033	Total
		17,187			27,871	3,716		139,353
			55,742		37,161			92,903
	3,066	3,066	3,066	3,066	3,530			15,794
	69,677				8,361	46,452	8,361	185,806
111,483		41,806	47,381	55,742	27,871		65,032	464,515
111,483	72,743	62,059	106,189	58,808	104,794	50,168	73,393	898,371

Appendix L3: Cumulative Transport Assessment Tables and Results

Transport: Cumulative Effects

This section presents an assessment of the cumulative transport effects arising from six sites within the Teesworks area. The sites are:

- South Bank;
- Dorman Point;
- Lackenby;
- The Foundry;
- Long Acres; and
- Steel House.

During Construction

As this is an outline planning application the end users of the development site, and therefore specifics of construction, are not known at the time of writing. As such, construction traffic has not been included in the cumulative assessment and instead it will be undertaken once the detailed design of the scheme is known. Notwithstanding this, a Framework Construction Environmental Management Plan ('CEMP') and Construction Traffic Management Plan ('CTMP') has been embedded into the proposed development and this will be taken into account in any future assessment.

Whilst a detailed assessment cannot be undertaken at this stage, professional judgement indicates that, with a CTMP and phased construction programme, any impacts would be minor and therefore the severance or amenity effect of construction traffic would be Not Significant.

During Operation

Severance

Table 1 identifies the percentage change in vehicle and HGV trips on all key receptor links between the 2033 Future Baseline and the 2033 Future Baseline with all the Teesworks area development sites in the AM peak hour. Further traffic flow information is available within the Transport Assessment ('TA') (at Appendix C1 of this ES).

Table 1 Cumulative Assessment of Severance, AM Peak Hour (2033 During Operation)

Receptor	Base Vehicle Flow	Base HGV Flow	Development – Vehicle Trips	Development – HGV Trips	Vehicle % Change	HGV % Change
A66 – east of Old Station Road	3,491	454	1,100	118	32%	26%
Old Station Road	668	120	491	41	74%	34%
Eston Road	507	91	880	107	174%	118%
Church Lane	525	5	132	15	25%	300%
A66 – west of Eston Road	3,326	432	1,087	117	33%	27%
A66 – east of Eston Road	3,176	318	1,403	153	44%	48%
Normanby Road – north of A66	447	80	104	13	23%	16%
Normanby Road – south of A66	615	6	98	10	16%	167%
A1053 – north of Trunk Road	2,670	214	2,113	215	79%	100%
A1053 – south of Trunk Road	2,017	182	1,562	150	77%	82%
A1085 Trunk Road – north of Steel House roundabout	1,095	88	2,000	174	183%	198%

Receptor	Base Vehicle Flow	Base HGV Flow	Development – Vehicle Trips	Development – HGV Trips	Vehicle % Change	HGV % Change
A1085 Trunk Road – south of Steel House roundabout	1,452	116	2,249	205	155%	177%
West Coatham Lane	891	9	124	9	14%	100%
A1042 Kirkleatham Lane south	855	26	242	19	28%	73%
Corporation Road	977	78	1,044	92	107%	118%
A174 east of Greystones roundabout	3,844	77	893	82	23%	106%
A174 west of Greystones roundabout	3,532	141	612	63	17%	45%

Table 2 shows the percentage change in vehicle and HGV trips on key receptor links between the 2033 Future Baseline and the 2033 Future Baseline with the Teesworks area development sites in the PM peak hour.

Table 2 Cumulative Assessment of Severance, PM Peak Hour (2033 During Operation)

Receptor	Base Vehicle Flow	Base HGV Flow	Development – Vehicle Trips	Development – HGV Trips	Vehicle % Change	HGV % Change
A66 – east of Old Station Road	3,341	434	1,178	63	35%	15%
Old Station Road	546	98	599	22	110%	22%
Eston Road	646	116	694	65	107%	56%
Church Lane	437	4	132	9	30%	225%
A66 – west of Eston Road	3,441	447	1,173	64	34%	14%
A66 – east of Eston Road	3,045	305	1,403	87	46%	29%
Normanby Road – north of A66	711	128	464	7	65%	5%
Normanby Road – south of A66	807	8	113	8	14%	100%
A1053 – north of Trunk Road	2,803	224	1,795	137	64%	61%
A1053 – south of Trunk Road	1,736	156	1,308	90	75%	58%
A1085 Trunk Road – north of Steel House roundabout	1,009	81	1,807	118	179%	146%
A1085 Trunk Road – south of Steel House roundabout	1,612	129	2,030	142	126%	110%
West Coatham Lane	1,022	10	109	6	11%	60%
A1042 Kirkleatham Lane south	957	29	248	14	26%	48%
Corporation Road	1,018	81	837	57	82%	70%
A174 east of Greystones roundabout	3,837	77	768	48	20%	62%
A174 west of Greystones roundabout	3,666	147	491	39	13%	27%

To assess the change in traffic flows, judgement has been made on the magnitude of change in accordance with IEMA guidance. Changes in traffic of less than 10% are considered to have no discernible environmental effect, given that daily variations in background traffic flow may fluctuate by this amount. A 30% change represents a reasonable threshold above which a change would be perceptible.

Table 1 and Table 2 show the magnitude of change is greater than 30% at the following locations:

- Old Station Road has a magnitude of change in the AM peak hour of a 74% increase in total vehicles and a 34% increase in HGV traffic. The respective values forecast during the PM peak hour are 110% and 22%;
- The A66 experiences a magnitude of change of over 30% in traffic both east and west in the AM and PM peak hours;
- Eston Road has a magnitude of change in the AM peak hour of a 174% increase in total vehicles and a 118% increase in HGV traffic. The respective values forecast during the PM peak hour are 107% and 56%;
- Similarly, the A1053 north and south of the Trunk Road roundabout is forecast to experience traffic flow increases above 30% in both the AM and PM peak hours;
- Normanby Road, north of the A66, has a magnitude of change of 65% in vehicle flows in the PM peak hour;
- The A1085 north of the Steel House roundabout has a magnitude of change of 183% in the AM peak hour and 179% in the PM peak hour. South of Steel House roundabout the values are 155% and 126% respectively with the addition of the cumulative traffic flows; and
- Corporation Road to the east of Kirkleatham Lane has a magnitude of change in total vehicles of over 100% in the AM peak hour and 82% in the PM peak hour.

The sensitivity of these receptors has been reviewed to determine the significance of these changes as follows:

- Eston Road provides access to Dorman Point development site and allows access to other premises neighbouring Dorman Point. The sensitivity of this receptor is medium and the large magnitude in traffic and HGV flow is a result of very low baseline flows. The significance of the permanent effect is therefore considered to be Minor Adverse. This is considered Not Significant.
- The A66 is a heavily used route providing east-west connections to the Strategic Road Network (SRN). As a result, the sensitivity of this receptor is high. Given that the magnitude of change is just over 30%, the significance of the permanent effect is considered to be **Moderate Adverse**. This is considered Significant.
- The A1053 forms part of the SRN and is therefore categorised as a high sensitivity receptor. The large magnitude of change results in the conclusion that the significance of the permanent effect is considered to be **Substantial Adverse**. This is considered Significant.
- Normanby Road serves other industrial sites and provides a link to South Bank Railway Station which increases the sensitivity of the receptor to medium. The significance of the permanent effect in the PM peak is therefore considered to be **Moderate Adverse**. This is considered Significant.
- The A1085 Trunk Road is a key distributor link with an average level of use that connects the town of Redcar with the A66 and the A1053. The sensitivity of this receptor is medium and there is a large magnitude change in traffic and HGV flows. The significance of the permanent effect is therefore considered to be **Substantial Adverse**. This is considered Significant.
- Corporation Road to the east of Kirkleatham Lane forms part of the A1085 and is therefore categorised as a medium sensitive receptor and the potential effect is also considered to be **Substantial Adverse**. This is considered Significant.

All other receptors are identified as showing a magnitude of change lower than 30% and therefore the cumulative impact is considered Not Significant.

Driver and Bus User Delay

The IEMA Guidelines note that these delays are only likely to be *'significant when the traffic in the network surrounding the development is already at, or close to, the capacity of the system.'*

To determine the significance of driver and bus user delay, the junction assessment programs have been used to assess capacity at the junctions within the study area, alongside professional judgement. Table 3 sets out

the junction capacity forecast at each of the key junctions with the addition of the cumulative development traffic. A copy of the junction capacity assessments on which this is based is contained within the TA (contained within Appendix C1 of this ES).

Table 3 sets out the degree of change in delay forecast at each of the key junctions with the addition of development traffic associated with the Teesworks area development sites. A copy of the junction capacity assessments on which this is based is contained within the TA (contained within Appendix C1 of this ES).

Table 3 Average Driver Delay (seconds) During Operation

Location	Receptor Sensitivity	Description of potential effect	Magnitude of change	Effect significance
A66/Old Station Road	High	The junction operates over capacity with the addition of cumulative development traffic.	Substantial	Substantial
A66/Eston Road	High	The junction operates over capacity with the addition of cumulative development traffic with significant delays on the A66 approaches and the turns into Eston Road.	Substantial	Substantial
A66/Normanby Road	High	The junction operates marginally over capacity with the addition of cumulative development traffic with delays on the A66 approaches.	Moderate	Moderate
A66/Tees Dock Road/Lackenby Roundabout	High	The cumulative assessment assumes changes to the junction to accommodate a new access into the Lackenby development. Compared to the base, the upgraded junction is still forecast to increase delay on the westbound approach to the junction.	Moderate	Moderate
A1085 Trunk Road / A1053 Greystone Road roundabout	High	The junction operates over capacity with the addition of cumulative development traffic with significant delays on the Greystone Road approach in the AM peak and the Trunk Road from Redcar in the PM peak.	Substantial	Substantial
A174 / Greystones Road roundabout	High	The junction operates over capacity, particularly in the PM peak hour, with significant delays on the A174 approaches.	Substantial	Substantial
A1085 Steel House Roundabout	High	The junction is over capacity with the addition of cumulative development traffic with significant delays on the Trunk Road approaches.	Substantial	Substantial

The table shows that the cumulative development traffic could have a permanent **Significant Substantial Adverse** effect on driver delay at the A66/Old Station Road junction, the A66/Eston Road junction, the

A1085/A1053 Greystones Road junction, the A174/Greystones Road junction and the A1085 Steel House roundabout junction. It would also have a permanent **Significant Moderate Adverse** effect at four other junctions. Four of these junctions are located on the A66 which is a bus route and, therefore, will also impact bus users.

Pedestrian and Cyclist Amenity

IEMA guidelines recommend pedestrian and cyclist amenity should be assessed where there is a significant increase in HGV flows. A significant change would be where the HGV component of traffic flow is halved or doubled, and therefore should be assessed if the HGV component of traffic flow increases by 100%.

Pedestrian and cyclist amenity have been assessed by identifying any significant changes in traffic flow on roads used by pedestrians and cyclists. Baseline pedestrian surveys have not been possible, but it is assumed that existing pedestrian and cyclist activity in the local area is limited as the site is vacant. Any changes are shown in Table 4.

Table 4 Pedestrian and Cyclist Amenity (During Operation)

Location	Receptor Sensitivity	Description of potential effect	Magnitude of change	Significance
A66/Eston Road crossroads	Medium	HGV increase is over 100% in the AM peak and 56% in the PM peak however the increase in traffic flow should not affect the signalised toucan crossing at the Church Lane/A66 crossroads.	Moderate	Minor
A66/Church Lane crossroads	Medium	Although the HGV increase is over 100%, the actual number of HGVs is relatively low and the increase in traffic flow should not affect the signalised toucan crossing at the Church Lane/A66 crossroads.	Minor	Minor
Normanby Road south of A66	Medium	Increase in traffic flow should not affect the signalised crossing on Normanby Road, although the HGV increase in the PM peak is over 100%, the actual number of HGVs is low.	Negligible	Negligible
A66/Tees Dock Road/A1053 roundabout	High	Increase in vehicular traffic through the junction could make it more difficult for non-motorised users to cross at the uncontrolled crossing located on the A66 arm of the junction.	Minor	Minor
A1053	High	Increase in vehicular traffic on the link could affect the amenity of users of the segregated footway and cycleway that runs parallel to the northbound carriageway of the A1053 between the Trunk Road and the A66, however, HGV flow change is less than 30%.	Moderate	Moderate
A1085 Trunk Road/ A1053 roundabout	Medium	Increase in vehicular traffic through the junction could make it more difficult for non-motorised users to cross at the uncontrolled crossings (Wilton access road, Greystone Road southbound and the Trunk Road southern arm), however, HGV flow change is less than 30%.	Moderate	Moderate

Location	Receptor Sensitivity	Description of potential effect	Magnitude of change	Significance
Greystones Roundabout	High	Increase in vehicular traffic through the junction could affect the amenity of users on the footway that travels underneath the junction via a subway.	Moderate	Minor

The sensitivity of these receptors has been reviewed to determine the significance of these changes as follows:

- A66/Eston Road signalised junction has a signalised pedestrian toucan crossing on Eston Road. The HGV change is significant in the AM peak hour, with an increase of over 100% due to Eston Road providing the access into the Dorman Point site. The effect on pedestrian and cyclist amenity at this location is therefore considered to be Minor Adverse as the crossing facility is already signalised to mitigate the impact on non-motorised users. This is considered Not Significant in EIA terms;
- A66/Church Lane signalised junction has a signalised pedestrian toucan crossing on Church Lane. The HGV change is significant and is over 100% however the actual number of HGVs is relatively low. Therefore, the effects on pedestrian and cyclist amenity at this location is considered to be Minor Adverse as the crossing facility is already signalised to mitigate the impact on non-motorised users. This is considered Not Significant;
- Normanby Road south of the A66 has a signalised pedestrian crossing and although HGV flow increases by 100% in the PM peak, the actual number of HGVs is 8, which is considered negligible. The effect on pedestrian and cyclist amenity at this location is therefore considered to be Negligible. This is considered Not Significant;
- A66/Tees Dock Road/A1053(T) roundabout – the junction has an unsignalised pedestrian crossing on the A66 arm of the junction where traffic is forecast to increase by 44% in the AM peak hour and 46% in the PM peak hour. The effect on pedestrian and cyclist amenity at this location is therefore considered to be Minor Adverse. This considered Not Significant
- A1053(T) – as part of the SRN, this link is considered a highly sensitive receptor and the magnitude of change is considered to be negligible as the traffic flow change is less than 30%. The change in traffic may be perceptible to users of the segregated footway and cycleway that runs parallel to the northbound carriageway and the effect is considered to be of Negligible significance. This is considered Not Significant;
- A1085 Trunk Road/ A1053(T) roundabout – the junction connects to the SRN and the magnitude of change is considered to be negligible as the arms predominantly affected already have signalised crossing facilities to mitigate the impact on non-motorised users. Overall therefore, the effect is considered to be of Negligible significance. This is considered Not Significant; and
- A1053(T) Greystones Road/A174(T) roundabout – the junction is part of the SRN and therefore a high sensitivity receptor. However, as pedestrians and cyclists at the junction benefit from segregated routes that travel under the junction via a subway, the effect on pedestrian and cyclist amenity due to an increase in traffic is therefore considered to be Minor Adverse. This is considered Not Significant.

Accidents and Safety

To accommodate the cumulative development, two highway network changes, as a minimum (aside from potential mitigation), are proposed:

- A new roundabout access into the Dorman Point development which is subject to a separate planning application (application number R/2020/0270/FFM); and
- A new arm into the Lackenby development from the A66/Tees Dock Road roundabout.

These changes to the network are identified within Chapter B for the Dorman Point and Lackenby ESs.

The development assessments identified the following five locations where there are clusters of collisions on the existing network:

- A66/Old Station Road/Middlesbrough Road roundabout;
- A66/Eston Road/Church Lane signalised junction;
- A66/Normanby Road signalised crossroads;
- A1085 Trunk Road/West Coatham Lane (Steel House roundabout); and
- A1085 Trunk Road/Kirkleatham Lane.

Only one of the locations shows an apparent trend in the collision data – the accidents at the A66/Normanby Road crossroads appear to be related to vehicles making a turning manoeuvre. The increase in traffic on this section of the A66, as a result of the cumulative developments, is considered to be significant and therefore there could be a **Moderate Adverse** effect on accidents and safety. This is considered to be Significant.

Appendix L4: Cumulative Air Quality Assessment Tables

Air Quality: Cumulative Effects

Table 1 Predicted annual mean NO₂ concentrations at assessed receptors for operational traffic

Receptor ID	Annual mean NO ₂ modelling results				
	Base 2019 NO ₂ (µg/m ³)	DM 2033 NO ₂ (µg/m ³)	DS 2033 NO ₂ (µg/m ³)	Change (DS-DM)	Impact descriptor
R1	19.2	21.5	22.5	1.0	Negligible
R2	18.0	20.3	21.1	0.8	Negligible
R3	17.9	20.3	21.6	1.3	Negligible
R4	18.1	20.5	22.0	1.5	Negligible
R5	18.0	20.4	22.1	1.7	Negligible
R6	15.7	18.1	18.9	0.8	Negligible
R7	15.3	17.6	18.3	0.7	Negligible
R8	14.6	17.0	17.2	0.2	Negligible
R9	15.6	18.2	18.6	0.4	Negligible
R10	16.2	18.9	20.2	1.3	Negligible
R11	14.4	16.8	17.2	0.4	Negligible
R12	14.4	16.9	17.3	0.4	Negligible
R13	15.8	18.5	19.1	0.6	Negligible
R14	15.4	18.1	18.6	0.5	Negligible
R15	31.4	33.8	34.2	0.4	Negligible
R16	35.1	37.6	38.2	0.6	Moderate adverse
R17	31.1	33.5	34.1	0.6	Slight adverse
R18	36.1	38.6	39.3	0.7	Moderate adverse
R19	27.8	30.2	31.0	0.8	Slight adverse
R20	27.8	30.2	31.0	0.8	Slight adverse
R21	25.8	28.2	28.6	0.4	Negligible
R22	23.7	25.9	26.5	0.6	Negligible
R23	22.7	24.9	25.6	0.7	Negligible
R24	15.5	17.7	20.0	2.3	Slight adverse
R25	15.4	17.7	19.3	1.6	Negligible
R26	15.2	17.5	18.6	1.1	Negligible
R27	16.1	18.3	20.5	2.2	Slight adverse
R28	15.4	17.6	18.0	0.4	Negligible
R29	18.1	20.3	21.0	0.7	Negligible
E1	18.7	20.8	21.0	0.2	Negligible
E2	18.6	20.7	20.8	0.1	Negligible

Note:
'R' denotes residential receptors
'E' denotes ecological receptors

Table 2 Predicted annual mean NO₂ concentrations at assessed receptors for operational traffic for receptors R16 and R18 with a lower process contribution

Receptor ID	Annual mean NO ₂ modelling results				
	Base 2019 NO ₂ (µg/m ³)	DM 2033 NO ₂ (µg/m ³)	DS 2033 NO ₂ (µg/m ³)	Change (DS-DM)	Impact descriptor
R16	19.2	35.9	36.5	0.6	Slight adverse
R18	18.0	36.9	37.6	0.7	Slight adverse
As described in Chapter N, receptors R16 and R18 have also been considered with a lower and more realistic process contribution to review the moderate adverse impact identified in Table 1.					

Table 3 Predicted annual mean PM10 concentrations at assessed receptors for operational traffic

Receptor ID	Annual mean PM ₁₀ modelling results				
	Base 2019 PM ₁₀ (µg/m ³)	DM 2033 PM ₁₀ (µg/m ³)	DS 2033 PM ₁₀ (µg/m ³)	Change (DS - DM)	Impact descriptor
R1	12.1	12.5	12.7	0.2	Negligible
R2	12.4	12.9	13.0	0.1	Negligible
R3	12.1	12.6	12.8	0.2	Negligible
R4	12.1	12.6	12.8	0.2	Negligible
R5	12.1	12.6	12.8	0.2	Negligible
R6	11.9	12.4	12.5	0.1	Negligible
R7	11.8	12.3	12.4	0.1	Negligible
R8	13.5	13.9	14.0	0.1	Negligible
R9	13.7	14.2	14.2	<0.1	Negligible
R10	12.2	12.7	13.0	0.3	Negligible
R11	12.1	12.5	12.6	0.1	Negligible
R12	12.1	12.6	12.6	<0.1	Negligible
R13	12.3	12.8	12.9	0.1	Negligible
R14	12.3	12.7	12.8	0.1	Negligible
R15	16.4	16.9	17.0	0.1	Negligible
R16	17.5	18.0	18.2	0.2	Negligible
R17	16.5	17.0	17.1	0.1	Negligible
R18	17.7	18.3	18.4	0.1	Negligible
R19	13.9	14.3	14.5	0.2	Negligible
R20	13.9	14.3	14.5	0.2	Negligible
R21	13.4	13.9	14.0	0.1	Negligible
R22	13.1	13.6	13.7	0.1	Negligible
R23	12.7	13.2	13.3	0.1	Negligible
R24	11.5	11.9	12.4	0.5	Negligible
R25	11.4	11.9	12.2	0.3	Negligible
R26	11.4	11.8	12.0	0.2	Negligible
R27	11.6	12.0	12.4	0.4	Negligible
R28	11.9	12.3	12.3	<0.1	Negligible
R29	12.0	12.4	12.5	0.1	Negligible
E1	10.6	11.0	11.1	0.1	Negligible
E2	10.6	11.0	11.1	0.1	Negligible

Note:
'R' denotes residential receptors
'E' denotes ecological receptors

Table 4 Predicted annual mean PM_{2.5} concentrations at assessed receptors for operational traffic

Receptor ID	Annual mean PM _{2.5} modelling results				
	Base 2019 PM _{2.5} (µg/m ³)	DM 2033 PM _{2.5} (µg/m ³)	DS 2033 PM _{2.5} (µg/m ³)	Change (DS - DM)	Impact descriptor
R1	7.9	8.0	8.1	0.1	Negligible
R2	8.1	8.2	8.3	0.1	Negligible
R3	7.8	7.9	8.1	0.2	Negligible
R4	7.8	8.0	8.1	0.1	Negligible
R5	7.9	8.0	8.1	0.1	Negligible
R6	7.7	7.8	7.9	0.1	Negligible
R7	7.7	7.8	7.9	0.1	Negligible
R8	8.0	8.2	8.2	<0.1	Negligible
R9	8.1	8.3	8.3	<0.1	Negligible
R10	7.7	7.8	8.0	0.2	Negligible
R11	7.6	7.7	7.8	0.1	Negligible
R12	7.6	7.8	7.8	<0.1	Negligible
R13	7.7	7.9	8.0	0.1	Negligible
R14	7.7	7.9	7.9	<0.1	Negligible
R15	10.1	10.3	10.3	<0.1	Negligible
R16	11.1	11.3	11.4	0.1	Negligible
R17	10.2	10.4	10.4	<0.1	Negligible
R18	11.2	11.4	11.5	0.1	Negligible
R19	8.9	9.1	9.2	0.1	Negligible
R20	8.9	9.1	9.2	0.1	Negligible
R21	8.6	8.8	8.8	<0.1	Negligible
R22	8.4	8.5	8.6	0.1	Negligible
R23	8.2	8.3	8.4	0.1	Negligible
R24	7.5	7.7	7.9	0.2	Negligible
R25	7.5	7.6	7.8	0.2	Negligible
R26	7.5	7.6	7.7	0.1	Negligible
R27	7.6	7.7	8.0	0.3	Negligible
R28	7.5	7.6	7.7	0.1	Negligible
R29	7.8	7.9	8.0	0.1	Negligible
E1	7.1	7.2	7.2	<0.1	Negligible
E2	7.1	7.2	7.2	<0.1	Negligible

Note:
'R' denotes residential receptors
'E' denotes ecological receptors