APPENDIX F - SUMMARY OF EPUK SIGNIFICANCE CRITERIA

The following criteria relate to changes in annual mean NO_2/PM_{10} concentrations and 24-hour mean PM_{10} concentrations resulting from the development.

ANNUAL MEAN NO2 AND PM10 CONCENTRATIONS

| Significance Criteria | Definition |
|------------------------------------|---|
| Neutral | The development causes no change in concentrations. |
| Negligible Impact | The development gives rise to a IMPERCEPTIBLE change in concentrations or; The development gives rise to a SMALL change in concentrations and predicted concentrations are below $36\mu g/m^3$; or The development gives rise to a MEDIUM change in concentrations and predicted concentrations are below $30\mu g/m^3$. |
| A Slight Adverse Impact | The development gives rise to a SMALL increase in concentrations and predicted concentrations with the development in place are above $36\mu g/m^3$; or The development gives rise to a MEDIUM increase in concentrations and predicted concentrations with the development in place are between $30\text{-}36\mu g/m^3$; or The development gives rise to a LARGE increase in concentrations and predicted concentrations with the development in place are less than $36\mu g/m^3$. |
| A Moderate Adverse Impact | The development gives rise to a MEDIUM increase in concentrations and predicted concentrations with the development in place are above $36\mu g/m^3$; or The development gives rise to a LARGE increase in concentrations and predicted concentrations with the development in place are between $36-40\mu g/m^3$. |
| A Substantial Adverse Impact | The development gives rise to a LARGE increase in concentrations and predicted concentrations with the development in place exceed the objective level of $40\mu g/m^3$. |
| A Slight Beneficial Impact | The development gives rise to a SMALL decrease in concentrations and predicted concentrations without the development in place are above $36\mu g/m^3$; or The development gives rise to a MEDIUM decrease in concentrations and predicted concentrations without the development in place are between $30\text{-}36\mu g/m^3$; or The development gives rise to a LARGE decrease in concentrations and predicted concentrations without the development in place are less than $36\mu g/m^3$. |
| A Moderate Beneficial Impact | The development gives rise to a MEDIUM decrease in concentrations and predicted concentrations without the development in place are above 36µg/m³; or The development gives rise to a LARGE decrease in concentrations and predicted concentrations without the development in place are between 36-40µg/m³. |
| A Substantial Beneficial Impact | The development gives rise to a LARGE decrease in concentrations and predicted concentrations without the development in place exceed the objective level of $40\mu g/m^3$. |

Where the magnitude of change in concentration for annual mean NO_2 and PM_{10} has been defined as follows: An IMPERCEPTIBLE change is a change of <0.4 μ g/m³;

A SMALL change is a change of less than $0.4 - 2\mu g/m^3$;

A MEDIUM change is a change of 2 - 4μg/m³; and

A LARGE change is a change of $> 4\mu g/m^3$.

DAILY MEAN PM₁₀ CONCENTRATIONS

| Significance Criteria | Definition |
|------------------------------------|--|
| Neutral | The development causes no change in the number of days of exceedence. |
| Negligible Impact | The development gives rise to a IMPERCEPTIBLE change in the number of days of exceedence; or The development gives rise to a SMALL change and the predicted number of days of exceedence is below 32 days; or The development gives rise to a MEDIUM change and the predicted number of days of exceedence is below 26 days. |
| A Slight Adverse Impact | The development gives rise to a SMALL increase and the predicted number of days of exceedence is above 32 days; or The development gives rise to a MEDIUM increase and the predicted number of days of exceedence is between 26 and 32 days; or The development gives rise to a LARGE increase and the predicted number of days of exceedence is below 32 days. |
| A Moderate Adverse Impact | The development gives rise to a MEDIUM increase and the predicted number of days of exceedence is above 32 days; or The development gives rise to a LARGE increase and the predicted number of days of exceedence is between 32 and 35 days. |
| A Substantial Adverse Impact | The development gives rise to a LARGE increase and the number of days of exceedence with the development in place is above 35 days. |
| A Slight Beneficial Impact | The development gives rise to a SMALL decrease and the predicted number of days of exceedence without the development is above 32 days; or The development gives rise to a MEDIUM decrease and the predicted number of days of exceedence without the development is between 26 and 32 days; or The development gives rise to a LARGE decrease and the predicted number of days of exceedence without the development is between 32 and 35 days. |
| A Moderate Beneficial Impact | The development gives rise to a MEDIUM decrease and the predicted number of days of exceedence without the development is above 32 days; or The development gives rise to a LARGE decrease and the predicted number of days of exceedence without the development is between 32 and 35 days. |
| A Substantial Beneficial Impact | The development gives rise to a LARGE decrease and the number of days of exceedence without the development in place is above 35 days. |

Where the magnitude of change is defined as the number of days of exceedence of a daily mean PM_{10} concentration of $50\mu g/m^3$:

An IMPERCEPTIBLE change is a change of < 1 day;

A SMALL change is a change of 1- 2 days;

A MEDIUM change is a change of 2 - 4 days; and

A LARGE change is a change of > 4 days.