

Generic risk assessment for standard rules set number SR2018 No 2 v1.0
Standard Facility: Specified Generators, Tranche B low risk, base load operation 1-2 MW with high background Nox

Location: Applies to all potential locations

Risk assessment carried out by: Environment Agency

Date: 04-May-18

The scope of the permit and associated rules is defined by the following risk criteria:

- Parameter 1 Total aggregated thermal input of all Specified generators burning natural gas of less than 1.2 MW.
 Parameter 2 The stack height shall be no less than 15 meters and must be vertical and unimpeded by cowls or caps, and at least 2 meters above the nearest building.
 Parameter 3 The activities must not be carried out within 500 metres of a Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar Site or a Site of Special Scientific Interest (SSSI).
 Parameter 4 The background NO₂ concentration at sensitive human receptor must be less than 36 µg/m³.

Abbreviations: SR - Standard Rule
 NO_x - Oxides of nitrogen
 NO₂ - Nitrogen Dioxide
 CO - Carbon Monoxide
 CHP - Combined heat and power
 SR (emissions of substances not controlled by emission limits) - emissions of substances shall not cause pollution...., with appropriate measures:

| Data and information | | | | Judgement | | | | Action (by permitting) | |
|---|--|---|---|-----------------------------|---|--|--|--|---|
| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment). |
| Local human population. | Releases of NO _x | Harm to human health - respiratory irritation and illness. | Air transport then inhalation. | Low | Medium | Medium | There is potential for exposure to anyone living close to the site or at locations where members of the public might be regularly exposed. | Activities shall be managed and operated in accordance with a management system (will include inspection and maintenance of equipment, including engine management systems), point source emissions to air with emission limits for NO _x . Secondary abatement can be fitted to achieve the emissions limit. A stack of at least 15 meters and 2 meters above the nearest building ensures good dispersion of NO _x . The activities shall be carried out where the NO ₂ background is less than 36 µg/m ³ ensuring the Environmental Standard protect human health is not exceeded at any ground level location. | Low |
| Protected nature conservation sites - SACs, SPAs, Ramsar sites and SSSIs. | Releases of NO _x | Harm to protected site through toxic contamination, nutrient enrichment, disturbance etc. | Air transport and deposition. | Low | Medium | Low | Emissions to air may cause harm to and deterioration of nature conservation sites. | Emission limits for NO _x are specified. At 500 metres or above, the potential hazards from the permitted activities pose a low risk to the broad sensitivity of species and habitats groups. The standard permit only applies at this distance or more. | Low |

Notes: Red triangle indicates comment containing supporting information
 Yellow columns contain drop down menus that allow automatic evaluation of risk in green column