DRAFT Exemption risk assessment

Installation of temporary haul roads and access tracks through a flood plain

The Environment Agency produces risk assessments for all new and amended exemptions. These list the potential risks and specify the measures required to manage them.

The assessment of each risk comprises the following components:

- information about the source, pathway and receptors – and the potential harm to those receptors
- an assessment of the level of risk and justification of that assessment
- actions for managing the risk (through exemption limits and conditions) and a residual risk rating after managing it

Risk management involves breaking or limiting the source-pathway-receptor linkage to reduce the risk. If we set minimum distances we explain the basis of the distances, for example by modelling.

We control the residual risk (after risk management) through compliance assessment or the use of our enforcement powers.

If you need to check the meaning of any terms we have used in the context of this risk assessment, see the ‘Explanation of terms’ section.

This risk assessment is based on the scope of the exemption and associated limits and conditions:

Exemption limits and conditions

a. The haul road or access track will be in place for no longer than 6 months.

b. The activity shall not be carried out within 8 metres of a flood defence structure, remote defence, sea defence, or river control structure.

c. Works do not disturb the bed of banks of any main river

d. The activity shall not be carried out within 200 metres radius of a European designated nature conservation site, SSSI or National Nature Reserve;

e. Any excavation is no more than 500 millimetres deep at any point.

f. The road or track is raised no higher than 300 millimetres above existing ground level

g. Every 10 metres there must be a water conduit/pipe above ground level to allow water movement across the flood plain.

h. The conduits/pipes must be no smaller than 100 millimetres in diameter

i. There shall be no other temporary haul roads or access tracks within 2 kilometres.

j. Measures shall be taken to ensure that the activities do not cause the spread of invasive non-native species or plant and animal diseases.

k. Except where it is unsafe to do so, debris lodged in the conduits is removed within 24 hours

l. When the works are completed, all materials and debris are removed from the site

m. The site returned to its previous condition and ground level when the structure has been removed.

1. Risks to local population and property

1.1 Flood risk

We have assessed the likelihood of increased flood risk on local people and businesses and damage to property and infrastructure.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting receptors as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating are because:

Structures which cross the flood plain can cause the flow of water to change its flow path or even cut the flood plain off. This could lead to water flowing where it is not currently modelled to and flood people and property who are not normally at risk.

Debris can accumulate during flood events which could cause a damn effect causing displacement of and the risk of flow diversion.

Managing the risk

The following limits and conditions will normally manage the risk, and we rate it as very low.

1. The exemption allows the temporary construction of a single-track haul road or access track.
2. The activity shall not be carried out within 8 metres of a flood defence structure, remote defence, sea defence, or river control structure.
3. Works do not disturb the bed or banks of any main river
4. The haul road or access track will be in place for no longer than 6 months.
5. Any excavation is no more than 500 millimetres deep at any point.
6. The road or track is raised no higher than 300 millimetres above existing ground level.
7. Every 10m there must be a water conduit/pipe above ground level to allow water movement across the flood plain.
8. The conduits/pipes must be no smaller than 100 millimetres in diameter
9. Except where it is unsafe to do so, debris lodged in the conduits is removed within 24 hours
10. When the works are completed, all materials and debris are removed from the site
11. The site is returned to its previous condition and ground level when the structure has been removed.
12. There shall be no other temporary haul roads or access tracks within 2 kilometres.

2. Risks to protected habitats, species and the historic environment

Protected habitats and the historic environment include:

- special areas of conservation
- special protection areas
- Ramsar wetland areas
- sites of special scientific interest
- Marine Conservation Zones
- Water Framework Directive status
- Scheduled Monuments

Protected habitats and species can be at risk from any source and by any pathway.

We have assessed the potential harm to protected habitats, species and the historic environment as:

- toxic contamination
- nutrient enrichment
- disturbance
- smothering
- loss or damage to habitat or species
- physical damage to designated sites
- ability of river to form and sustain habitat
- increased sediment load
- deterioration of ecological status
- deterioration of high morphology status

Judgement of risk

We have judged the:

- likelihood of the hazard affecting receptors to be medium
- the overall severity of potential consequence to be medium
- overall risk rating to be medium

The reason for giving the activity this rating is because emissions to air, water or deposition onto land may cause harm to and deterioration of protected habitat sites.

Structures can cut off wildlife pathways and corridors and damage habitats during the construction.

Managing the risk

The following conditions will normally manage the risk, and we rate it as very low.

1. The activity shall not be carried out within 200 metres radius of a European designated nature conservation site, SSSI or National Nature Reserve;

2. Measures shall be taken to ensure that the activity does not cause the spread of invasive non-native species or plant and animal diseases.

Explanation of terms

Likelihood of exposure

This is the likelihood of the receptors being exposed to the hazard. The meanings of the definitions are:

- high – exposure is probable – direct exposure is likely with no or few barriers between the hazard source and the receptor
- medium – exposure may be probable – feasible exposure is possible as the barriers to exposure are less controllable
- low – exposure is unlikely – several barriers exist between the hazard source and receptor to reduce exposure
- very low – exposure is very unlikely – effective, multiple barriers are in place to reduce exposure

Overall magnitude of potential consequence

This is the severity of the consequence if the hazard is realised and may cause actual or potential harm.

This will have a high, medium, low or very low rating using attributes and scaling to consider 'harm'.

Risk rating

We determine the risk rating by combining the likelihood of exposure with the magnitude of the potential consequences.

We assess these ratings to be:

- high risk – very likely to occur, severe consequences, requires additional assessment and active management
- medium risk – may occur, moderate consequences, requires additional assessment and may need active management or monitoring (or both)
- low and very low risks – unlikely to occur, minor consequences but will require periodic review