## AIR QUALITY - Categorising risk



#### **RISK FACTORS**

Composition of spoil (fines, organic matter, anoxic sediment, acid sulfate soils)

Location of spoil placement area

Location of sensitive receivers

Prevailing wind direction

Transport methodology

Volume of spoil and duration of stockpiling spoil on site

Removal method of spoil

Dewatering

Ruptures of equipment (eg geobags, pipes)

Poor machinery maintenance (fumes)

#### **ACTIVITIES**

Removal, placement and transport of spoil

Dewatering of spoil

Stockpiling of spoil

Storage of construction material for coffer dams and/or bunds

Construction of bunds, dams and dewatering ponds

## AIR QUALITY

(Dust and odour)

#### **OPERATIONAL CONTROLS**

Timing of campaign

Community notification and engagement prior to works and continued engagement throughout campaign

Spoil placement/stockpile location

Dredge and dewatering methods

Odour and dust management plans and contingency responses

Implementation of control methods to contain dust and odour (eg cover, barriers, aeration, etc)

Regular maintenance of machinery

## IMPACTS

Nuisance dust and odour

Health and wellbeing

Amenity and enjoyment of the area

Complaints from residents or other sensitive receivers

Build up of dust on neighbouring properties

## RISK

#### LOW

Spoil comprises clean sand or sediment (no organic matter)

No nearby sensitive receivers that may be impacted by dust and/or odour (>300 m)

Spoil present on site for less than a week and/or is unlikely to dry out

Spoil contained during dewatering

Spoil consist of coarse material

No construction material stored on site

#### MEDIUM

Less than 300 m from a sensitive receiver

Low levels of organic matter in sand/sediment that is likely to result in some odour

Fine sediment with the potential to result in dust (dry, warm conditions)

Odour/dust likely but likely to persist for less than 2 weeks

Dust/odorous material is exposed and not contained

Access roads and site compound is dirt

Construction material stored on site

#### HIGH

Less than 300 m from a sensitive receiver

Spoil has high organic content or contains anoxic sediments or acid sulfate soils that is odorous

Spoil contains fine sediment that is likely to dry out and generate dust

Odour and/or dust likely to persist for over 2 weeks

### SUGGESTED MANAGEMENT

Complaints register

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Community notification and consultation prior to works

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Complaints register

Community notification and engagement prior to works

Odour and/or dust management strategies included in DMP to mitigate impacts

Select Risk Category = Low/Medium/High (circle)

# AIR QUALITY – EPA Expectations

DREDGE APPLICANTS OR LICENSEES MUST	Met	Notes/Evidence
Take reasonable and practicable measures to minimise air quality impacts resulting from dust and odour on sensitive receivers.		
Inform or engage with neighbouring properties of the degree and duration of odour if impacts are likely to occur.		
Use a complaints register to record and address complaints.		
Manage dust and fuel emissions from the operation of machinery at the site so it does not affect neighbouring properties or other users of the area.		
Not unlawfully burn material.		