

Northampton Gateway Environmental Statement
Chapter 6; Geology, Soils and Groundwater

Matrix 6.3: Operational Phase Impact and Effects Risk Assessment

Existing Source / Hazard Magnitude	Potential Impacts	Operational Receptor Sensitivity (Tab 6.2)	Operational Effects (Table 6.4)	Operation Strength of pathway	Operation Likelihood (Tab 6.5)	Operation Risk (Tab 6.6)	Operation Stage Mitigation	Revised Post Mitigation Risk
Contaminated soils Very Low hazard rating Greenfield Site No significant sources of contamination identified.	Inhalation, ingestion and dermal contact	Site Workers/ Users (L/VL)	Negligible	Weak	Unlikely	Very Low Risk	Greenfield Site. No contamination identified within soil or Groundwater.	Negligible
	Inhalation, ingestion and dermal contact	Adjacent Site Users (H)	Moderate/Minor	Weak	Unlikely	Low / Very Low Risk	Construction would utilise only clean natural site won soils.	Negligible
	Contamination of local surface water features via run off or groundwater	Surface Water Features (H)	Moderate/Minor	Weak	Unlikely	Low Risk/Very Low Risk	Majority of site will be hard standing, buildings and roads where no direct pathway to soils is present.	Negligible
	Contamination of Principal/Secondary aquifer	Groundwater (H)	Moderate/Minor	Weak	Unlikely	Low Risk/Very Low Risk	Landscape areas will be covered with clean topsoil's and habitat landscape planting created which will lock in soils reduce dust risks.	Negligible
Contaminated groundwater Very Low hazard rating Greenfield Site No significant sources of contamination identified.	Ingestion and dermal contact with contaminated water	Site Workers (VL/L)	Negligible	Weak	Unlikely	Very Low Risk	Any contamination identified will be very small volume and localised and will be treated appropriately as agreed with the regulators and will not present any risk to end users, adjacent site users or controlled waters.	Negligible
	Contamination of local surface water features via run off or groundwater	Surface Water Features (H)	Moderate/Minor	Weak	Unlikely	Low Risk/Very Low Risk	Operations on the sites will be controlled by suitable design standards and existing regulatory controls and licensing by the regulatory authorities depending upon exact end uses and any processes, chemicals or fuels used (if any) as well as the operators own environmental policies.	Negligible
	Contamination of Principal/Secondary aquifer	Groundwater (H)	Moderate/Minor	Weak	Unlikely	Low Risk/Very Low Risk	Operational sites will be fenced and secure.	Negligible
Contaminated dusts Very Low hazard rating Greenfield Site No significant sources of contamination identified.	Inhalation of contaminated dusts	Site Workers (VL/L)	Negligible	Weak	Unlikely	Very Low Risk	A site wide drainage and flood risk strategy and measures will be designed and constructed in to the scheme in accordance with the requirements of the planning authorities such that there will be no risk to controlled waters.	Negligible
	Inhalation of contaminated dusts	Adjacent Site Users (H)	Moderate/Minor	Weak	Unlikely	Low / Very Low Risk	Scheme design will be subject to planning authority's approvals, regulators approvals and design and building control checks and approvals.	Negligible
Ground gases & odours Very Low hazard rating no significant sources of gas identified or recorded.	Inhalation of ground gases, explosive risk	Site Workers (VL/L)	Negligible	Weak	Unlikely	Very Low Risk	Regulator consultation has and will be carried out throughout the entire process to ensure suitably robust design and construction methodology is in place.	Negligible
	Inhalation of ground gases, explosive risk	Adjacent Site Users (H)	Moderate/Minor	Weak	Unlikely	Low / Very Low Risk		Negligible