

Source	Pathway	Receptor	Harm	Likelihood	Consequence	Magnitude of Risk	Justification of Magnitude	Risk Management	Residual Risk
Release of Emissions to Air	Combustion of fuel in the new and existing Boilers	Local human population	Harm to human health (respiratory irritation and illness)	Medium	Medium	Medium	Exposure to products of combustion could have an impact to local human and ecological receptors	Refer to Air Quality Assessment Combustion control systems and regular PPM ensure boilers are working correctly. Extractive monitoring will be carried out to check boilers are meeting MCPD emission limits.	Negligible
	Emissions from new plant and tank farm via carbon scrubber			Medium	Low	Low	Exposure to VOC releases combustion could have an impact to local human and ecological receptors	Refer to H1 Assessment Emissions are orders of magnitude below relevant air quality assessment levels. Routine process monitoring is carried out to check the scrubber system is working. Planned preventative maintenance is carried out.	Negligible
Release of particulate matter (dusts) and micro-organisms (bio aerosols)	Atmosphere and then inhalation	Local human population & Site staff	Harm to human health (respiratory irritation and illness)	Low	High	Medium	Permitted wastes do not include wastes that solely consist of dusts, powders or loose fibres Solvent Recovery activities within closed systems Local residents are often sensitive to dust	<i>New distillation columns:</i> Waste not of a dusty nature. All loads of waste entering the site will be contained Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems – distillation columns connected to air emissions scrubbing system. <i>Habitats Assessment:</i> The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low/negligible impact by particulate matter due to the nature of the waste types processed by the operations. Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by particulate matter due to the nature of the waste types processed by the operations and the distance from the site. No other designated sites are located within 1km of the site	Negligible

Environmental Risk Assessment

Garston Distillation Services

	Atmosphere and then deposition	Local human population	Nuisance –dust on cars, clothing etc.	Low	Medium	Low	As above	As above	Negligible
Release of litter	Atmosphere and then deposition	Local human population and livestock	Nuisances, loss of amenity and harm to animal health	Low	Medium	Low	Permitted wastes do not include wastes that have the potential to cause littering Solvent Recovery activities within closed systems Local residents are often sensitive to litter	<i>New distillation columns:</i> Waste does not have the potential to cause littering issues. All loads of waste entering the site will be contained. Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems <i>Habitats Assessment:</i> The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low/negligible impact by windblown litter due to the nature of the waste types processed by the operations. Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by windblown litter due to the nature of the waste types processed by the operations and the distance from the site. No other designated sites are located within 1km of the site.	Negligible
Mud on Roads	Vehicles entering and leaving site	Local human population and livestock	Nuisances, loss of amenity and road traffic accidents	Low	Medium	Low	Permitted wastes do not include wastes that have the potential to cause mud. Local residents are often sensitive to mud on roads Road Safety	<i>New distillation columns:</i> Waste does not have the potential to cause mud on the road issues. All roads leading to the site and within the site are sealed and paved. All loads of waste entering the site will be contained Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems. <i>Habitats Assessment:</i> The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for negligible impact by mud on the road due to the paved road surfaces on site and nature of the operations.	Negligible

								<p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by mud on the road due to the paved road surfaces on site and nature of the operations. Also the distance from the site.</p> <p>No other designated sites are located within 1km of the site</p>	
Odour	Atmosphere and then inhalation	Local human population	Nuisances, loss of amenity	Low	Medium	Low	<p>Permitted wastes may have the potential to cause odour if not contained.</p> <p>Local residents are often sensitive to odour</p>	<p><i>New distillation columns:</i></p> <p>All loads of waste entering the site will be contained.</p> <p>Waste to be stored in purpose built storage tanks.</p> <p>Waste to be processed within closed systems – distillation columns connected to air emissions scrubbing system.</p> <p><i>Habitats Assessment:</i></p> <p>The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low impact by odour due to the nature of the operations.</p> <p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by odour due to the nature of the operations and the distance from the site.</p> <p>No other designated sites are located within 1km of the site</p>	Very Low
Noise and vibrations	Atmosphere and ground for vibrations	Local human population	Nuisances, loss of amenity	Medium	Medium	Medium	<p>The additional infrastructure may have the potential to cause additional noise. However the noise assessment set out in Appendix I of the Supporting Statement concludes that no further mitigation would be required to reduce noise levels from the</p>	<p><i>New distillation columns:</i></p> <p>All loads of waste entering the site will be contained.</p> <p>Waste to be stored in purpose built storage tanks.</p> <p>Waste to be processed within closed systems – distillation columns connected to air emissions scrubbing system.</p> <p><i>Habitats Assessment:</i></p> <p>The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low impact by noise and vibrations due to the nature of the operations.</p> <p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for</p>	Low

							proposed development Local residents are often sensitive to noise	negligible impact by noise and vibrations due to the nature of the operations and the distance from the site. No other designated sites are located within 1km of the site	
Animals, Pests and insects	Atmosphere and land	Local human population	Nuisances, loss of amenity, harm to health	Low	Medium	Low	Permitted wastes do not include wastes that have the potential to attract pests and insects Local residents are often sensitive to pests and insects	<i>New distillation columns:</i> Waste does not have the potential to attract pests and insects. All loads of waste entering the site will be contained. Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems. <i>Habitats Assessment:</i> The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for negligible impact by pests and insects due to the nature of the waste types processed by the operations. Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by pests and insects due to the nature of the waste types processed by the operations and the distance from the site. No other designated sites are located within 1km of the site.	Negligible
Spillage of waste, contaminated rainwater run-off	Direct runoff from site across ground surface via surface water drains	Surface water	Surface Water pollution – harm to ecology	Medium	Medium	Medium	Site located in FZ1 and at low potential from flooding from surface water. Refer to Flood Risk Assessment in Appendix G of the Supporting Statement. Refer to H1 Assessment in Appendix H of the Supporting Statement for	<i>New distillation columns:</i> All loads of waste entering the site will be contained. Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems. Impermeable surface and sealed drainage throughout the site. No direct emissions to the River Mersey. All discharges controlled by procedures and adherence to permitted emission limits. Regular inspection of drainage system Regular maintenance of drainage system Adherence to Flood RA recommendations	Low

							assessment of increase flows via W1	<p><i>Habitats Assessment:</i></p> <p>The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low impact by contaminated surface water due to the waste being held within dedicated storage tanks and transferred/processed within sealed systems. Also considering the sealed surface and management/monitoring systems employed.</p> <p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by contaminated surface water due to the management systems employed by the operations and the distance from the site.</p> <p>No other designated sites are located within 1km of the site</p>	
	Direct runoff from site across ground surface via defects in site surface	Ground water	Groundwater Pollution	Low	Medium	Low	Site is not located within a groundwater source protection zone	<p><i>New distillation columns:</i></p> <p>All loads of waste entering the site will be contained. Waste to be stored in purpose built storage tanks. Waste to be processed within closed systems. Impermeable surface and sealed drainage throughout the site. Regular inspection of drainage system. Regular maintenance of drainage system. Monitoring of groundwater in accordance with Site Condition Report.</p> <p><i>Habitats Assessment:</i></p> <p>The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low impact by contaminated groundwater due to the waste being held within dedicated storage tanks and transferred/processed within sealed systems. Also considering the sealed surface and management/monitoring systems employed.</p> <p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by contaminated groundwater due</p>	Very Low

								to the management systems employed by the operations and the distance from the site.	
	Direct runoff from site across ground surface via defects in site surface	Land	Soil Contamination	Low	Medium	Low	Site has a long history of previous Industrial uses	<p><i>New distillation columns:</i></p> <p>All loads of waste entering the site will be contained.</p> <p>Waste to be stored in purpose built storage tanks.</p> <p>Waste to be processed within closed systems.</p> <p>Impermeable surface and sealed drainage throughout the site.</p> <p>Regular inspection of surface and drainage system.</p> <p>Regular maintenance of surface and drainage system.</p> <p>Monitoring of groundwater in accordance with Site Condition Report.</p> <p><i>Habitats Assessment:</i></p> <p>The Mersey Estuary RAMSAR, SSSI, LWS site is located adjacent to the site. This habitat has the potential for low impact by contaminated soil due to the waste being held within dedicated storage tanks and transferred/processed within sealed systems. Also considering the sealed surface and management/monitoring systems employed.</p> <p>Banks Road and Garston Gasworks LWS is located 620m north-east. This habitat has the potential for negligible impact by contaminated soil due to the management systems employed by the operations and the distance from the site.</p>	Very Low