

DRAX ENVIRONMENTAL PERMIT VARIATION, ENVIRONMENTAL RISK ASSESSMENT

This environmental risk assessment has been produced as part of Drax’s staged environmental permit variation application (2022/2023) in relation to the carbon capture system to be installed.

The environmental risk assessment has been undertaken in accordance with the methodology set out in Environment Agency guidance “Risk assessments for your environmental permit” in the GOV.UK website (<https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>).

The Drax site is operated in accordance with an Environmental Management System (EMS) which is certified to ISO 14001. The existing EMS will continue to be implemented at the site and it will be reviewed and updated as necessary in order to reflect any changes introduced by the permit variation.

LAND AND GROUNDWATER CONTAMINATION RISK ASSESSMENT AND MANAGEMENT PLAN

What you do that can harm and what could be harmed			Manging the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
Spillage of polluting liquids from small mobile containers, such as intermediate bulk carrier, drums, bottles etc.	River Ouse Surface water Adjacent drainage ditches Soil / vegetation Groundwater beneath site	Site drains Surface water Percolation through soil Groundwater percolation (<i>in the event that hardstanding fails</i>)	Storage areas will comprise hardstanding with appropriately sized bunds or containment systems to prevent uncontrolled releases and will be designed to BS8007(BS EN 1992), CIRIA C535 and / or CIRIA C736, as applicable (or other equivalent standards). The storage areas will be correctly signed including providing the maximum storage capacity. Storage areas will be designed to comply with HSE chemical warehousing requirements in relation to hazard separation and fire prevention. Any rainwater and spillages will be diverted to a sealed collection point where they can be	Low	Contamination	Not significant if management practices adhered to

			<p>manually pumped via an appropriate drainage system.</p> <p>When constructed, regular monitoring with regards to the condition of these storage areas will take place as per existing site planned preventative maintenance procedures. Any deformities or signs of damage will be reported to management and addressed appropriately (i.e. repaired).</p> <p>Site emergency procedures will be followed in the event of a failure of any container or secondary containment. These will be updated to reflect the changes and additional risks posed from the new storage and delivery facilities.</p> <p>Spill equipment is available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in event of a spill.</p> <p>Any spills / leaks are recorded in accordance with the EMS and are reviewed as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped.</p> <p>Any potential impact to the ground or river will be reported to the Environment Agency in accordance with the requirements of the environmental permit.</p>			
Spillage of solvent KM21	River Ouse Surface water Adjacent drainage ditches Soil / vegetation	Site drains Surface water Percolation through soil Groundwater percolation (<i>in the</i>	Storage area will comprise hardstanding with appropriately sized bunds or containment systems to prevent uncontrolled releases and will be designed to BS8007(BS EN 1992), CIRIA C535 and / or CIRIA C736, as applicable (or other equivalent standards).	Low	Contamination	Not significant if management practices adhered to

	Groundwater beneath site	<i>event that hardstanding fails)</i>	<p>The storage area will be correctly signed including providing the maximum storage capacity.</p> <p>Any rainwater and spillages will be diverted to a sealed collection point where they can be manually pumped via an appropriate drainage system.</p> <p>When constructed, regular monitoring with regards to the condition of the storage area will take place as per existing site planned preventative maintenance procedures. Any deformities or signs of damage will be reported to management and addressed appropriately (i.e. repaired).</p> <p>Site emergency procedures will be followed in the event of a failure of any container or secondary containment. These will be updated to reflect the changes and additional risks posed from the new storage and delivery facilities.</p> <p>Spill equipment is available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in event of a spill.</p> <p>Any spills / leaks are recorded in accordance with the EMS and are reviewed as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped.</p> <p>Any potential impact to the ground or river will be reported to the Environment Agency in accordance with the requirements of the environmental permit.</p>			
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<p>Tanker unloading to storage tanks and removal of liquid wastes from tanks</p>	<p>River Ouse Surface water Adjacent drainage ditches Soil / vegetation Groundwater Groundwater beneath site</p>	<p>Site drains Surface water Percolation through soil Groundwater percolation (<i>in the event that hardstanding fails</i>)</p>	<p>Delivery and storage areas will comprise hardstanding with appropriately sized bunds or containment systems to prevent uncontrolled releases and will be designed to BS8007(BS EN 1992), CIRIA C535 and / or CIRIA C736, as applicable (or other equivalent standards). The storage areas will be correctly signed including providing the maximum storage capacity.</p> <p>Storage areas will be designed to comply with HSE chemical warehousing requirements in relation to hazard separation and fire prevention.</p> <p>All tanker deliveries and loading/unloading operations are supervised and performed in accordance with site specific documented risk assessments and operating procedures.</p> <p>Any rainwater and spillages will be diverted to a sealed collection point where they can be manually pumped via an appropriate drainage system.</p> <p>When constructed, regular monitoring with regards to the condition of these delivery and storage areas will take place as per existing site planned preventative maintenance procedures. Any deformities or signs of damage will be reported to management and addressed appropriately (i.e. repaired).</p> <p>Site emergency procedures will be followed in the event of a failure of any container or secondary containment. These will be updated to reflect the changes and additional risks posed from the new storage and delivery facilities.</p>	<p>Low</p>	<p>Contamination</p>	<p>Not significant if management practices adhered to</p>
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		<p>Spill equipment is available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in event of a spill.</p> <p>Any spills / leaks are recorded in accordance with the EMS and are reviewed as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped.</p> <p>Any potential impact to the ground or river will be reported to the Environment Agency in accordance with the requirements of the environmental permit.</p>			
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ODOUR RISK ASSESSMENT AND MANAGEMENT PLAN

What you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
<p>With respect to odour, the main raw material KM21™ solvent is not inherently odorous however there is the potential for amine degradation products to be generated from reactions in the process.</p> <p>Odorous emissions from the PCC process are considered in the risk assessment below, however, as detailed above, the changes implemented on site are not considered to have the potential to generate significant odours.</p>						
<p>Odour releases from PCC process during normal operations</p>	<p>The closest odour sensitive receptors to the PCC plant are a number of isolated local residential receptors and the nearby villages of Barlow, Camblesforth and Drax.</p>	<p>Air</p>	<p>The PCC process plant and associated systems will be operated and maintained in accordance with manufacturer recommendations.</p> <p>Solvent dosing and reaction rates will be controlled in accordance with the set parameters. These will be monitored through a dedicated and automated HMI control system for the absorber.</p> <p>The process is designed for maximum solvent capture but some will break down into amines which can be oxidised to ammonia. These can then be removed through the post absorber gas treatment system which includes for an acid solution designed to capture any amines. The acid solution will be monitored to ensure that it retains its effectiveness; the key parameters will comprise continuous monitoring for pH and flow (with duty/standby monitoring equipment) .</p> <p>Any odour complaints would be dealt with under the complaints procedures in the EMS (EMS doc ref: DMI-GOP-11).</p>	<p>Low- amine releases have been modelled and found to be insignificant</p>	<p>Odour nuisance and pollution</p>	<p>Low if management practices adhered to</p>

			<p>Odour complaint records are also evaluated as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors from fumes, gases or smells have been identified.</p>			
<p>Odour releases from new wastewater treatment plant during normal operations</p>	<p>The closest odour sensitive receptors to the PCC plant are a number of isolated local residential receptors and the nearby villages of Barlow, Camblesforth and Drax.</p>	Air	<p>The carbon capture wastewater treatment plant will incorporate pH control, chemical coagulation, flocculation, settling and filtration. It will be operated by trained staff in accordance with document operating procedures that form part of the site's EMS. All plant and equipment at the wastewater treatment plant will be operated and maintained in accordance with manufacturer recommendations.</p> <p>Due to the nature of the effluent to be treated (i.e. onsite PCC plant industrial effluent only – comprising effluent from the quench column, absorber column and carbon dioxide processing and compressor plant) and the type of treatment proposed (physico-chemical), it is not expected to be an inherently odorous process. Nonetheless, appropriate design measures will reduce the potential for odorous emissions, including the use of covered tanks and enclosed equipment, where appropriate, and process monitoring to ensure effective treatment within the design parameters.</p> <p>Any odour complaints would be dealt with under the complaints procedures in the EMS (EMS doc ref: DMI-GOP-11).</p>	Low	Odour nuisance and pollution	Low if management practices adhered to

		<p>Odour complaint records are also evaluated as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors from fumes, gases or smells have been identified.</p>			
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NOISE AND VIBRATION RISK ASSESSMENT AND MANAGEMENT PLAN

What you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
<p>Additional vehicle movements associated with raw material deliveries / waste exports from the PCC plant and associated systems</p>	<p>The closest noise sensitive receptors to the PCC plant are a number of isolated local residential receptors and the nearby villages of Barlow, Camblesforth and Drax.</p>	<p>Sound propagation through the air</p>	<p>Vehicle numbers are not expected to increase significantly as a result of the changes on site (introduction of the PCC process). However, the following risk management measures will continue to be implemented.</p> <p>Existing speed limits and designated traffic management routes which are already imposed at Drax Power Station will remain in place.</p> <p>Vehicle engines will not be left idling.</p> <p>Route management at site should minimise the use of reversing alarms.</p> <p>Vehicle movements to and from site predominantly take place during normal office hours.</p> <p>Any noise complaints would be dealt with under the complaints procedures in the EMS (EMS doc ref: DMI-GOP-11).</p> <p>Noise complaint records are also evaluated as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors from noise emitted from premises, vehicles or machinery have been identified.</p>	<p>Low – noise emissions have been modelled and found to be insignificant</p>	<p>Increased noise levels at receptors</p>	<p>Not significant if management practices adhered to</p>

<p>Noise from operation of the PCC plant and associated systems</p>	<p>The closest noise sensitive receptors to the PCC plant are a number of isolated local residential receptors and the nearby villages of Barlow, Camblesforth and Drax.</p>	<p>Sound propagation through the air</p>	<p>The PCC plant and associated systems will be designed to meet BAT standards, which will include a combination of appropriate operational measures, low-noise equipment, noise attenuation and noise-control equipment.</p> <p>The following measures have been incorporated into the design to mitigate noise impact:</p> <ul style="list-style-type: none"> - A single acoustic enclosure for the Combined Power Turbine Building; - A single acoustic closure for relevant pumps; - Double acoustic enclosures for the carbon dioxide compressor buildings (the carbon dioxide compressor buildings will include mechanical ventilation with noise silencing on air louvres); - double acoustic enclosures for the gas flue blower fans and acoustic cladding for the ducting of the flue gas blower fans; - Acoustic cladding for the ducting of the gas flue blower fans; and - Cladding on the building envelope of the carbon dioxide compressor building. <p>A noise assessment has been undertaken and this concludes that during both the daytime and night-time periods, the ambient noise levels would be dominated by the existing sound climate and, therefore, no change in ambient noise levels is expected due to the operation of the PCC plant at any sensitive receptor (refer to Section 12 of the Permit Variation Application).</p>	<p>Low – noise emissions have been modelled and found to be insignificant</p>	<p>Increased noise levels at receptors</p>	<p>Not significant if management practices adhered to</p>
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		<p>All plant and equipment is subject to routine inspection and maintenance in accordance with manufacturers' recommendations and the site's PPMP. This will reduce the likelihood of noise occurring due to failed equipment and / or worn out parts that need servicing / replacing.</p> <p>Any noise complaints would be dealt with under the complaints procedures in the EMS (EMS doc ref: DMI-GOP-11).</p> <p>Noise complaint records are also evaluated as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors from noise emitted from premises, vehicles or machinery have been identified.</p>			
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FUGITIVE EMISSIONS RISK ASSESSMENT AND MANAGEMENT PLAN

What you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
Litter	Local residences Adjacent land River Ouse Local drainage ditches	Air (wind-blown)	<p>Any additional raw materials received, and products removed from site, will be in bulk containers such as drums / IBCs or tankers which will not generate litter waste.</p> <p>The permit variation application does not include any changes which are considered to increase the risk of litter from the site.</p> <p>Any litter complaints will be investigated in accordance with procedures within the EMS (complaints procedure doc ref: DMI-GOP-11).</p> <p>Any corrective actions identified will be implemented accordingly.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors from the accumulation, deposit or other matters considered to be a statutory nuisance have been identified.</p>	Very low	Increased litter nuisance at receptors	Not significant if management practices adhered to
Pests	Local residences Adjacent land River Ouse Local drainage ditches	Air / water / land	<p>All processes take place within buildings or enclosed vessels / tanks / pipework and, as such, they do not particularly attract pests. Waste is segregated and stored in appropriate containers in designated areas of the site and removed by licensed contractors.</p>	Very low	Increased pest nuisance at receptors	Not significant if management practices adhered to

			<p>The site has a third-party pest contractor who regularly attends site for the control of pests.</p> <p>The permit variation application does not include any changes which are considered to increase the risk of pests at the site.</p> <p>Any pest complaints will be investigated in accordance with procedures within the EMS (complaints procedure doc ref: DMI-GOP-11). Any corrective actions identified will be implemented accordingly.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant effects for human receptors arising from animals or insects have been identified.</p>			
Dust	<p>Local residences</p> <p>Adjacent land</p> <p>River Ouse</p> <p>Local drainage ditches</p>	Air / water / land	<p>None of the activities described in this permit variation application will generate significant dust. The main potential to generate dust is from vehicle movements with mud being tracked on to site from local roadways. If this is the case a road sweeper will be hired to clean access routes and main trafficked areas on site.</p> <p>An adequate water supply will be maintained on site for appropriate dust / particulate matter suppression / mitigation, should it be required.</p> <p>Any dust complaints will be investigated in accordance with procedures within the EMS (complaints procedure doc ref: DMI-GOP-11). Any corrective actions identified will be implemented accordingly.</p> <p>A Statutory Nuisance Statement has been prepared to support the DCO application for the project and this reports that no significant</p>	Very low	Increased dust nuisance at receptors	Not significant if management practices adhered to

		effects for human receptors from dust have been identified.			
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ACCIDENTS RISK ASSESSMENT AND MANAGEMENT PLAN

What you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?

Note: All spillage accident scenarios have already been considered in the above risk assessment tables (land and groundwater contamination) along with the proposed risk management measures. Non-spill based accident scenarios are considered in the table below.

<p>Failure of storage or process tanks</p> <p>Also applies to failure of pipework whilst transferring materials.</p>	<p>River Ouse</p> <p>Surface water</p> <p>Adjacent drainage ditches</p> <p>Soil / vegetation</p> <p>Groundwater beneath site</p>	<p>Site drains</p> <p>Surface water</p> <p>Percolation through soil</p> <p>Groundwater percolation (<i>in the event that hardstanding fails</i>)</p>	<p>All tanks (and associated pipework) installed as part of the PCC plant and associated systems will be new and located on concrete hardstanding within appropriate bunds / secondary containment. Most pipework will be located above ground and any below ground pipework will have leak detection.</p> <p>In the event of any leaks from these tanks / pipes the contents would be captured by the site's sealed drainage system.</p> <p>The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped.</p> <p>Regular monitoring with regards to the condition of all tanks, tanker loading areas and pipework takes place and will be as per site planned preventative maintenance procedures (PPMP). All new plant and equipment installed as part of the changes on site will be added to the site's PPMP. Any deformities or signs of damage will be reported to management and addressed appropriately (i.e. repaired). High-level alarms and level indication equipment will be fitted to relevant tanks to prevent overfilling.</p>	<p>Low</p>	<p>Contamination</p>	<p>Not significant if management practices adhered to</p>
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			<p>Site emergency procedures (EMS doc ref: DMI-SAF-33) will be followed in the event of a failure of storage tanks and associated equipment, including loading pipework.</p> <p>Appropriate spill equipment (that is suitable to the material being stored / handled in that part of this site) is available, and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in event of a spill.</p> <p>Any spills / leaks are recorded in accordance with the EMS and are reviewed as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>Any potential impact to the ground or river will be reported to the Environment Agency in accordance with the requirements of the environmental permit.</p>			
<p>Accidental mixing of incompatible chemicals could cause:</p> <ul style="list-style-type: none"> - Fume generation - Explosion - Release of hazardous material into the environment from damaged infrastructure 	<p>Air</p> <p>River Ouse</p> <p>Surface water</p> <p>Adjacent drainage ditches</p> <p>Soil / vegetation</p> <p>Groundwater beneath site</p>	<p>Air</p> <p>Site drains</p> <p>Surface water</p> <p>Percolation through soil</p> <p>Groundwater percolation (<i>in the event that hardstanding fails</i>)</p>	<p>The PCC plant has a limited number of chemicals associated with its operation which are mainly the solvent and the acid used for the acid solution in the post absorber gas treatment system. These chemicals are kept separate and would not be inherently reactive in combination.</p> <p>Any issues such as leaks, overflows, or accidental spills will be reported to relevant site management and addressed appropriately.</p> <p>Any personnel handling chemicals will be required to be appropriately trained and wear the correct PPE.</p> <p>Spill equipment will be made available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in the event of a spill.</p>	Low	Contamination Harm to human health	Not significant if management practices adhered to

			<p>New procedures will be developed, as necessary, for operation of the new / changes to existing plant and equipment as part of the PCC process and the procedures will be incorporated into the existing EMS.</p> <p>Any incidents or emergencies will be dealt with in accordance with the emergency response procedure (EMS doc ref: DMI-SAF-33) under the EMS.</p>			
Blocked drainage / pipework systems leading to potential leaks or bursts	<p>River Ouse</p> <p>Surface water</p> <p>Adjacent drainage ditches</p> <p>Soil / vegetation</p> <p>Groundwater beneath site</p>	<p>Site drains</p> <p>Surface water</p> <p>Percolation through soil</p> <p>Groundwater percolation (<i>in the event that hardstanding fails</i>)</p>	<p>Periodic monitoring of the condition of pipework transferring chemicals and raw materials takes place as per site PPMP.</p> <p>Any deformities are reported to management and addressed appropriately (i.e. repaired). Any plant and equipment installed as part of the changes on site described in the permit variation application will be added to the site's PPMP.</p> <p>Site emergency procedures (EMS doc ref: DMI-GOP-11) will be followed in the event of a failure of any pipework or drainage system.</p> <p>Spill equipment is available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in event of a spill.</p> <p>The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped.</p> <p>Any spills / leaks are recorded in accordance with the EMS and are reviewed as part of annual management review in order to assess trends and target opportunities for improvements.</p> <p>Any potential impact to the ground or river will be reported to the Environment Agency in</p>	Low	Contamination	Not significant if management practices adhered to

			accordance with the requirements of the environmental permit.			
Failure of monitoring equipment (potentially leading to discharge of effluent outside of emission limit values) (ELV)	River Ouse	Discharge Point W1	<p>Treated effluent will continue to be discharged to the River Ouse via existing discharge point W1.</p> <p>All monitoring equipment is regularly inspected and maintained as per the manufacturer's recommendations. Any faulty equipment will be repaired or replaced. In the event that repair or replacement of monitoring equipment is required, periodic monitoring would resume in the interim period to check compliance against the permitted ELVs.</p> <p>Monitoring equipment is MCERTS where available and calibrated in accordance with requirements.</p> <p>Only fully competent staff are responsible for ensuring that monitoring equipment is operating efficiently and as expected.</p> <p>Relevant emergency procedures are in place to address the event of monitoring equipment failure which could lead to discharges of effluent not conformant to the emission limit values / parameters established in the site's environmental permit. However, the site operates on a pumped system basis with process control for pH and temperature. In the event that ELVs are exceeded the pumps to W1 would be turned off.</p> <p>The Environment Agency will be notified via a Schedule 5 Notification in the event of discharge to the River Ouse which exceeds permitted limits and an appropriate course of action followed.</p>	Low	Contamination	Not significant if management practices adhered to

Failure of mains electricity	None (unless failure of electricity caused knock on effects to other receptors already identified in this risk assessment)	None (unless failure of electricity caused knock on effects via other pathways already identified in this risk assessment)	The plant would be shut down in a controlled manner / certain operations would cease if there was a significant loss of electricity supply. The main Drax Power Station site would be able to supply the parasitic load until safely shut down.	Very low	None	Not significant
Deterioration of plant / equipment due to lack of maintenance	River Ouse Surface water Adjacent drainage ditches Soil / vegetation Groundwater beneath site Surrounding residential properties	Site drains Surface water Percolation through soil Groundwater percolation (<i>in the event that hardstanding fails</i>) Air	<p>The PCC plant and associated systems will comprise a bespoke process with new equipment which is designed to have an operational lifespan of at least 25 years. Any consumable parts would be identified by the manufacturer and a spares programme would be developed around critical components.</p> <p>A written procedure, inspection regime and PPMP for all plant and equipment forming part of the changes will be developed and implemented in line with that for the existing site equipment. PPM is controlled through an electronic planning system.</p> <p>Maintenance is carried out in accordance with manufacturers' recommendations by Drax's maintenance team and external approved contractors.</p> <p>Any operational or maintenance issues will be reported to relevant Management teams and will be addressed appropriately (i.e. repair work undertaken, replacement plant / equipment fitted where necessary).</p> <p>Failures of equipment will be monitored under the preventative maintenance programme to</p>	Low	Contamination Odour Harm to human health	Not significant if management practices adhered to

			<p>identify trends and to ensure failures are captured before they happen where practicable.</p> <p>Spill equipment is available and the Emergency Spillage Procedure (EMS doc ref: DIN-GOP-002) will be followed in the event of a spill due to deterioration of plant / equipment.</p>			
Fire	<p>River Ouse</p> <p>Surface water</p> <p>Adjacent drainage ditches</p> <p>Soil / vegetation</p> <p>Groundwater beneath site</p> <p>Surrounding residential properties</p>	<p>Site drains</p> <p>Surface water</p> <p>Percolation through soil</p> <p>Groundwater</p> <p>Air</p>	<p>Fire alarm systems are already in place at the Drax Power Station site. The system for the PCC plant will be maintained and tested according to Fire and Rescue service recommendations.</p> <p>Fire extinguishers are available at various points around the site and staff are instructed on how to use these.</p> <p>The capacity of the existing firewater system in place on site will be extended to contain and mitigate fires on the PCC plant and, furthermore, the capacity of the existing firewater tank will be increased.</p> <p>An emergency procedure (EMS doc ref: DMI-SAF-33) incorporating actions to be taken in the event of a fire is already in place. This will be reviewed and updated as necessary following the changes.</p> <p>All staff are informed of the emergency procedure with regards to fire and the emergency plan is subject to periodic drills. Nominated fire wardens are also in place at the site.</p> <p>Preventative maintenance on all electrical systems are conducted annually by an approved contractor.</p>	Low	<p>Contamination</p> <p>Odour</p> <p>Impact on human health</p>	<p>Not significant if management practices adhered to</p>

<p>Failure to contain fire water run-off</p>	<p>River Ouse Surface water Adjacent drainage ditches Soil / vegetation Groundwater beneath site</p>	<p>Site drains Surface water Percolation through soil Groundwater</p>	<p>Fire prevention measures as detailed above.</p> <p>Fire water will be contained on site. The site is isolated from the surrounding water bodies and all liquids to be moved offsite have to be pumped. In the event of a fire on site, all pumps would be shut down and the firewater held on site by the containment systems in place (primary / secondary / tertiary).</p> <p>Firewater can be tested prior to either treatment on site or tankering off-site for treatment.</p>	<p>Low</p>	<p>Contamination</p>	<p>Not significant if management practices adhered to</p>
<p>Flooding / heavy rainfall</p>	<p>River Ouse Surface water Adjacent drainage ditches Soil / vegetation Surrounding residential properties</p>	<p>Site drains Surface water Percolation through soil Groundwater Air</p>	<p>A site-specific Flood Risk Assessment was undertaken to support the DCO application. The Environment Agency's flood map for planning shows that the project area is located partially within Flood Zone 2 and partially within Defended Flood Zone 3. As a result of hydraulic modelling, mitigation is proposed in the form of raising any infrastructure in the floodplain by 800 mm above the design flood level.</p> <p>An emergency procedure incorporating actions to be taken in the event of a flood is already in place at the site. This will be reviewed and updated as necessary following the changes.</p>	<p>Low</p>	<p>Damage to plant and equipment Contamination Odour</p>	<p>Not significant if management practices adhered to</p>
<p>Intruders on site causing vandalism / sabotage of plant and equipment</p>	<p>River Ouse Surface water Adjacent drainage ditches Soil / vegetation Surrounding residential properties</p>	<p>Site drains Surface water Percolation through soil Groundwater Air</p>	<p>The site is located in an agricultural area, with perimeter fencing surrounding the site boundary and access only permitted through the designated site entrance.</p> <p>All visitors at the site have to sign in at the gatehouse.</p> <p>The site gates are locked out of operational hours. Security personnel and CCTV systems are in place at strategic locations around site.</p>	<p>Low</p>	<p>Contamination Harm to human health Odour</p>	<p>Not significant if management practices adhered to</p>

