

16.0 SUMMARY OF MITIGATION AND MONITORING

Introduction

16.1 This chapter of the ES presents a summary of the mitigation and monitoring measures identified by the specialist environmental studies in the ES. Full details can be found in the respective ES chapters.

16.2 Schedule 4, part 1 of the EIA Regulations (Ref. 16.1) require an ES to include:

“...a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.”

16.3 The mitigation and enhancement measures included in this ES fall into one of four categories:

- 1) Measures to be incorporated into the detailed design;
- 2) Measures to be applied during construction; and
- 3) Measures to be applied during operation of the Proposed Development; and
- 4) Measures to be applied during decommissioning and restoration.

16.4 **Table 16.1** outlines a topic by topic summary of the key issues addressed by the ES and the mitigation measures identified. The mitigation measures are separated into the above categories.

Implementation of Mitigation Measures

16.5 The Applicants anticipate that, where appropriate, NYMNPA will attach conditions on the planning permission to ensure commitment to these mitigation measures.

Review Procedure

16.6 The construction programme is expected to take place during 2014, subject to gaining planning permission. It is recognised that environmental standards and legislation that currently apply to the Proposed Development may change during this period. In light of this, the Applicants intend to undertake regular reviews of the Proposed Development, to ensure that best practice is being followed. The review process will be iterative and ongoing, so

that new information is identified at an early stage and incorporated into the Proposed Development.

- 16.7 Construction techniques will be incorporated into the works which, where practicable, will be updated when new techniques are devised. This will also apply to monitoring of the works, ensuring that effective mitigation measures are used to minimise disturbance to surrounding receptors.
- 16.8 The Applicants have committed to preparing a Construction Environmental Management Plan (CEMP) which will clearly set out the methods of managing environmental issues during the construction works. The CEMP will be implemented prior to works commencing on the Application Site and will be updated regularly, thus ensuring it reflects and incorporates current legislation as outlined within this ES.

Table 16.1: Summary of Mitigation and Monitoring Measures

Topic	Effect	Measures
1) Measures incorporated into the Detailed Design		
Landscape and Views	Effects on landscape and views	<ul style="list-style-type: none"> • The separation and water handling unit, amine and glycol contactors, produced liquid drum, dew point control unit and some auxiliary equipment will be enclosed within the Gas Conditioning Building which will be a maximum height of 8.5m. • The height of equipment and structures has been minimized where practicable i.e. tanks positioned horizontally rather than vertically. • Landscape proposals include the enhancement of existing planting along Ebberston Common Lane, adjacent to the proposed location of the flare and further enhancement of planting surrounding the existing well site and compound. • New planting will reinforce and enhance the existing landscape framework and compensate for limited areas of vegetation loss. • Planting to be included within the overall landscape strategy is to include predominately native and locally endemic species with reference to the Supplementary Planning Document Design Guide (Ref. 16.2). • A recessive colour/material pallet for permanent built elements or structures will be established as part of the Proposed Development. Dark colours (dark green, brown, or dark grey) are generally more acceptable as they complement the natural environment throughout the seasons and the different characteristics of daylight during the year. Consideration will also be given to the general colour of the backdrop against which the building will be seen. As a general rule the roof of an agricultural building should be darker than the walls to bring out the building's form. Dark roofs reflect less light and generally make buildings look smaller and less conspicuous. • Lighting will be designed to take account of the environmental classification of the Assessment Site and meets the national guidance and standards for the UK for such an installation. The design has taken due account of any wildlife issues through careful choice of light source and location of lighting luminaries.
Air Quality	Emissions to air from natural gas refining	<ul style="list-style-type: none"> • The Proposed Development has been designed to minimize emissions to air through the following: <ul style="list-style-type: none"> - The flow line from the well head to the process piping will not require pigging. - The gas facility will include isolation valves to enable the isolation of relatively small, discrete sections of plant to minimise quantities of gas requiring venting. The relevant isolated section can then be depressurised via the flare. - As the gas inventory is the primary resource it is in the interest of the operator / owner to flare as little gas as possible. The plant will include isolation valves to enable the isolation of relatively small, discrete sections of plant to minimise the quantity of gas to be released. . - The sulphur will be removed from the gas in the upstream processes. The fuel gas

Topic	Effect	Measures
		system will be fed by clean export gas that meets the National Grid NTS specifications (which includes sulphur content).
	Emissions to air from the flare	<ul style="list-style-type: none"> • The Proposed Development has been designed to minimise emissions to air through the following: <ul style="list-style-type: none"> - Flaring will be used if depressurisation is required; - A suitable flare control system will be specified. Steam injection is not relevant to the flare; - The flare will be designed to operate without smoke and will be serviced and maintained to ensure reliable operation; - Flaring will be minimised by through the use of: <ul style="list-style-type: none"> ▪ Integrated control system and instrumentation to avoid emergency scenarios and minimise flaring; ▪ Equipment will be suitably designed and specified to avoid excessive maintenance requirements and minimise the need for (planned) depressurisation; and • Equipment, relief systems and procedures will be designed and specified to minimise flaring. - Relief of gas to flare will be minimised through: <ul style="list-style-type: none"> ▪ Design and specification of suitable equipment and systems; ▪ Appropriate operating procedures; and ▪ Good housekeeping.
	Effects from odour releases	<ul style="list-style-type: none"> • The 'sweetening plant' will remove odorous gas from natural gas prior to any combustion on site.
Noise	Effects of noise on sensitive receptors	<ul style="list-style-type: none"> • At the equipment procurement stage the design team will confirm that all plant operating together can achieve the proposed noise limit of 60dB L_{Aeq,5min} at any point on the Assessment Site boundary.
Flood risk, hydrology and drainage	Effect on flood risk and contamination of ground and surface water	<ul style="list-style-type: none"> • The areas of the development platform within the Assessment Site (area of the Lockton Compound) which are not currently protected by a bentonite membrane will be leveled and a bentonite membrane with a suitable protective sand layer above and below. Crushed stone or concrete will then be laid on top of the bentonite membrane. • Water falling onto the extended area of the Lockton Compound will drain into a lined perimeter French drain and discharge through the proposed oil interceptor into a soakaway within the well site. • The pipeline between the well site and Lockton Compound will be above ground and will be supported on pipe racks or stands. • The existing perimeter ditch at the well site will be adapted to include an outlet to the oil interceptor and soakaway. • All tanks will be bunded to provide 110% of the capacity of the largest tank.

Topic	Effect	Measures
Ground Conditions and Contamination	Effects from oil, hydrocarbon and process waste contamination	<ul style="list-style-type: none"> The provision of securely bunded areas with interceptors in areas where oil, fuel and process wastes are stored, handled or transferred.
2) Measures to be applied during Construction		
Ecology	Effects on habitats resulting from dust emissions	<ul style="list-style-type: none"> Dust emissions arising from the topsoil stripping during construction will be controlled through standard dust suppression measures set out in the CEMP to minimise dust deposition.
	Effects on breeding birds	<ul style="list-style-type: none"> The following measures will be incorporated into the CEMP: <ul style="list-style-type: none"> Vegetation clearance (including tree felling) will be undertaken outside the breeding bird season where possible (typically March to September inclusive). If vegetation clearance is unable to be undertaken outside the breeding bird season, all areas of vegetation should be checked by an ecologist prior to clearance. In the event that active nest sites are found, an appropriate buffer zone (c. 5m) should be established around the nest and works suspended in this zone until the nest has become unoccupied and any young have fledged. Liaison will be undertaken with the Forestry Commission during the 2013 goshawk survey season to establish whether any additional goshawk nest sites within 400m of the assessment site have been identified. In the event that active goshawk nest sites are identified prior to the commencement of construction, the following measures are likely to be required: <ul style="list-style-type: none"> Maintenance of a 400m disturbance-free zone between February and July inclusive; and All tree felling works will be undertaken outside the breeding bird season where practicable (which will be extended to include February due to early nesting habits of goshawk).
	Effects on bats	<ul style="list-style-type: none"> Lighting (both permanent and temporary columns) will be directed and focused downwards with appropriate lantern designs to reduce light spillage onto habitats outside construction areas.
	Effects on reptiles	<ul style="list-style-type: none"> Areas of deadwood piles and loose heaps of soil/pine needles suitable for reptile hibernation will be cleared outside the winter period to avoid the reptile hibernation season (i.e. between November and February to avoid the bird breeding season) where practicable. Vegetation will be cleared under the supervision of an ecologist to allow any reptiles to be moved to a place of safety. If site clearance works are to be undertaken in the season during which reptiles are active above ground, phased clearance of the vegetation on the topsoil storage bund will be undertaken to enable any reptiles present to escape from affected areas. Any reptiles encountered incidentally during the construction works will be immediately

Topic	Effect	Measures
		<p>moved to a place of safety if they are unable to escape unaided, and the advice of an ecologists sought.</p>
Landscape and Views	Effects on landscape and views	<ul style="list-style-type: none"> • The following measures will be incorporated into the CEMP: <ul style="list-style-type: none"> - Retention of existing hedgerows and woodland between the boundary of the Assessment Site and Ebberston Common Lane to keep an established screen between activity within the Assessment Site and adjacent sensitive receptors, all trees to be retained will be protected in accordance with BS5837:2012 - Trees in Relation to Construction (Ref. 16.3); - Establishment of the landscape proposals as an early stage of the construction phase where possible; - Location of contractor's compounds and material stockpiles away from nearby sensitive receptors i.e. south-east corner of the Assessment Site; - Control of the lighting of construction compounds and machinery to minimise upward and outward light pollution. In addition, ensure that the minimum area only is lit, for the minimum period of time; - Limit movements of material between stockpiles so that they do not shift over time thereby adding to the sense of fragmentation and instability of the landscape; - Minimisation of the duration of construction activities which require cranes, scaffolding, and use of designated routes within and around the Assessment Site; and - Agreeing appropriate working hours as proposed (07:00 to 18:00 Monday to Friday and 07:00 to 13:00 on Saturdays) with North York Moors National Park Authority to ensure that adverse visual impacts of construction experienced by the closest residential receptors (Ebberston Common and South Moor Farms) are minimised at times when they could reasonably expect a cessation of construction activity, for example evenings, weekends and bank holidays.
Air Quality	Effects from release of construction dust	<ul style="list-style-type: none"> • Construction dust will be controlled through the application of a series of measures incorporated into the CEMP including (where appropriate): <ul style="list-style-type: none"> - Regular inspection and, where necessary, wet suppression of material/soil stockpiles (including wind shielding, storage away from site boundaries, and restricted height of stockpiles); - Appropriate orientation of material stockpiles to minimise wind dispersion; - Provision of wheel washing and wet suppression during loading of wagons/vehicles; - Covering vehicles carrying dry spoil and other wastes; - Shielding of dust-generating construction activities; - Provision of suitable site hoarding; - Restricting vehicle speeds on access roads and other unsurfaced areas of the Assessment Site; and - Inspection of unsurfaced haulage routes, and wet suppression as necessary, during prolonged dry periods.

Topic	Effect	Measures
Noise and Vibration	Effects from construction noise	<ul style="list-style-type: none"> • Good practice as recommended in BS 5228-1:2009 (Ref. 16.4) will be implemented. Measures include maintaining good relations with people living and working in the vicinity of site operations by keeping people informed of progress. • Quiet working methods will be adopted and implemented through the CEMP including: <ul style="list-style-type: none"> - The use of most suitable plant; - Reasonable hours of working for noisy operations; - Noise will be controlled at source; - On-site noise levels will be monitored regularly; - Avoidance of unnecessary revving of engines; - Switch of equipment when it is not required; - Minimise the drop height of materials; - Starting up plant and vehicles sequentially rather than all together; and - Audible reversing alarms should be of types that have a minimum noise effect on persons outside the site. • The local authority may consider it appropriate to lay down or agree work programmes and periods of use of certain equipment. • Noise from construction will be controlled primarily by the restriction of working hours. In this case, 07.00 to 18.00 Monday to Friday and 07.00 to 13.00 Saturday.
Traffic and Transportation	Effects from traffic along Ebberston Lane and Ebberston Common Lane	<ul style="list-style-type: none"> • Route cards will be issued to all drivers to ensure that they use the designated access route to the Assessment Site. • All vehicle speeds along Ebberston Lane and Ebberston Common Lane will be restricted to 30 mph. • Large loads being moved up Ebberston Lane and Ebberston Common Lane will be escorted by an escort vehicle to avoid conflict with oncoming traffic.
Flood Risk, Hydrology and Drainage	Effects on surface and groundwater	<ul style="list-style-type: none"> • The CEMP will include the following measures in compliance with the Environment Agency Prevention Pollution Guidelines especially PPG 6 (Ref. 16.5): <ul style="list-style-type: none"> - The construction compound and pipe storage area works will be located within the limits of the well site, which has an impermeable membrane passing under the well site and into the perimeter ditches; - The ditch lining that is currently exposed will be protected to ensure that it retains its water retaining qualities; - During the adaptation of the existing perimeter ditch at the well site, the ditches will be temporarily blocked to the side of the working area to prevent accidental discharge of water or contaminants into the partly construction system or the ground; - All fuel tanks brought onto site for construction machinery will be kept locked when not being used, and sat within a containment tray in the bunded section of the Assessment Site; - Inspect all storage containers for all materials to ensure that they are fit for purpose regularly inspected and maintained;

Topic	Effect	Measures
		<ul style="list-style-type: none"> - No materials will be stored on uncovered ground; - The fuel store will be located where it is not at risk of site vehicles colliding with it; - Machinery shall be re-fuelled in the site compound where the existing site construction will provide protection to the aquifer; - Any maintenance of machinery shall be carried out within the well site to contain spillages of oil, fuel or hydraulic oil; - All cement and grout shall be stored within a contained area and all washing out of cement mixers or concrete delivery lorries must be carried out so that the discharge flows into a lined settlement pond. All tools will also be washed in a suitable area where the discharge cannot flow into the ground; - Avoid storage of large volumes of potential contaminants such as fuel and waste water that will have a much more significant effect than smaller volumes; - All machinery left on site during construction will have drip trays placed under it; - Waste fluids arising from the testing or construction works should be taken off site and disposed of at a suitably licensed facility; and - All static machinery located outside the bunded containment area of the well site during construction shall have drip trays placed under them. • All pipework shall be pressure-tested prior to being commissioned. • All fluids used during testing shall be drained into a prepared sump with a capacity 110% of the pipeline capacity and all waste fluids arising from the testing or construction works will be taken off site by road tanker and disposed of at a suitably licensed facility.
Archaeology and Cultural Heritage	Effects on unknown archaeology beyond the existing made ground	<ul style="list-style-type: none"> • In the event of the Proposed Development expanding beyond the existing compounds, a programme of archaeological monitoring and recording will be carried in areas outside of the construction work within the footprint of the Proposed Development (such as to the north of Lockton Compound and in the location of the flare) to record any areas of potential archaeological remains.
Ground Conditions and Contamination	Oil and Hydrocarbon contamination	<ul style="list-style-type: none"> • To mitigate the risk of pollutants entering the controlled waters, handling and storage of fuels and oils will adhere to Environment Agency guidance: PPG1, PPG2, PPG5, PPG6, PPG8, PPG18 and PPG21 (Ref. 16.5). Measures to be implemented through the CEMP will comprise: <ul style="list-style-type: none"> - Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents, including locating the storage area away from the surface water drainage system and watercourses on an impermeable base, with an impermeable bund that has no outflow and is of adequate capacity to contain at least 115% of the contents; - Machinery will be refuelled using a transfer hose and valves. Trigger guns will also be protected from vandalism and kept locked when not in use; - When not operational, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics that will be checked and emptied regularly via a licensed waste disposal operator; and

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		<ul style="list-style-type: none"> - An emergency spillage action plan will be produced, which site staff will have read and understood. On-site provisions will be made to contain a serious spill or leak through the use of spill kits, booms, bunding and absorbent material. Site staff will be trained in the use of emergency spill response equipment.
	Loss of ground support due to dissolution, sliding caused by adverse bedrock structure, collapse and running sands.	<ul style="list-style-type: none"> • Appropriate geotechnical investigation will be undertaken in key areas of the Proposed Development and construction activities. The ground conditions encountered will need to be logged and geotechnical testing of the soils will need to be undertaken: <ul style="list-style-type: none"> - Appropriate stability analyses should be undertaken to confirm if there is a risk; and - If required, temporary excavation support and temporary dewatering could be designed to prevent collapse of the excavation while it is open.
3) Measures to be applied during Operation		
Ecology	Effects on bats	<ul style="list-style-type: none"> • Lighting (both permanent and temporary columns) will be directed and focused downwards with appropriate lantern designs to reduce light spillage onto habitats outside the development footprint.
Landscape and Views	Effects on landscape and views	<ul style="list-style-type: none"> • A landscape maintenance programme will be adopted to ensure the long-term survival of existing and proposed features in order to enhance their biodiversity and amenity value. The details of the landscape maintenance programme will be agreed with the North York Moors National Park Authority.
Noise and Vibration	Effects of noise on nearby sensitive receptors	<ul style="list-style-type: none"> • The noise limit to ensure that there is no audible noise above background at the nearest noise-sensitive receptor, Eberston Common Farm, is 60dB $L_{Aeq,5min}$ at any point on the Assessment Site boundary.
Traffic and Transportation	Effects from traffic along Eberston Lane and Eberston Common Lane	<ul style="list-style-type: none"> • Route cards will be issued to all drivers to ensure that they use the designated access route to the Assessment Site. • All vehicle speeds along Eberston Lane and Eberston Common Lane will be restricted to 30 mph. • Large loads being moved up Eberston Lane and Eberston Common Lane will be escorted by an escort vehicle to avoid conflict with oncoming traffic. • The cargo should be transported by a haulier licensed to carry such products. • The vehicle used to transport the product will have a fully documented maintenance record including a record of examination of hydraulic braking systems. • The vehicle carrying the cargo will be escorted from the A170 up to the Assessment Site. • The vehicle carrying the cargo will avoid taking right hand turns across the flow of traffic unless there is a clearly defined right hand turn lane in a position of good visibility and speed restrictions. • The proposed route to the Assessment Site will come from the west along the A170 and then turn into Eberston Lane towards the Assessment Site.

Topic	Effect	Measures
		<ul style="list-style-type: none"> The proposed route away from the Assessment Site will turn eastwards on the A170 and then turn southwards on the B1258 to Knapton.
Flood Risk, Hydrology and Drainage	Effects on flood risk	<ul style="list-style-type: none"> Rainwater will be gathered in ditches and either used on site or discharged through an oil interceptor into the soakaway.
	Effects on quality of surface and ground water	<ul style="list-style-type: none"> The oil interceptor will provide control on all discharge and a monitoring point will permit sampling to check the discharge. Valves fitted to the outflow pipe from the Assessment Site will enable isolation of the interceptor during drilling operations and the risk of contamination to the aquifer will be negligible. Rainwater collecting within the new tank bunds and other bunded areas will be taken off site in tankers to be processed at an off-site facility.
Ground Conditions and Contamination	Oil, hydrocarbon and process waste contamination	<ul style="list-style-type: none"> To mitigate the risk of pollutants entering the controlled waters, handling and storage of fuels and oils will adhere to Environment Agency guidance: PPG1, PPG2, PPG5, PPG6, PPG8, PPG18 and PPG21 (Ref. 16.5). Measures will comprise: <ul style="list-style-type: none"> Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents, including locating the storage area away from the surface water drainage system and watercourses on an impermeable base, with an impermeable bund that has no outflow and is of adequate capacity to contain at least 115% of the contents; Machinery will be refuelled using a transfer hose and valves. Trigger guns will also be protected from vandalism and kept locked when not in use; When not operational, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics that will be checked and emptied regularly via a licensed waste disposal operator; and An emergency spillage action plan will be produced, which site staff will have read and understood. On-site provisions will be made to contain a serious spill or leak through the use of spill kits, booms, bunding and absorbent material. Site staff will be trained in the use of emergency spill response equipment.
4) Measures to be applied during Demolition and Restoration		
Ecology	Effects on habitats resulting from dust emissions	<ul style="list-style-type: none"> Dust emissions arising from the topsoil stripping during decommissioning and restoration regardless of whether future planning permission is secured for the well site will be controlled through standard dust suppression measures set out in the CEMP to minimise dust deposition.
Landscape and Views	Effects on landscape and views	<ul style="list-style-type: none"> Reinstatement work if future planning permission is not secured will include removing the existing access, hardcore and fencing associated with the well site and flare and re-grading stored sub-soil and topsoil to replicate the pre-existing levels. This will then be scarified and returned to forestry in accordance with the Forestry Commission Plan within the next planting

Topic	Effect	Measures
		<p>season. Much of this area is proposed to include regenerating broadleaf forest which will be assisted by the proposed planting of broadleaf species along the Assessment Site's southern boundary. The Lockton Compound will be returned to its existing state.</p> <ul style="list-style-type: none"> • If future planning permission is secured then the well site will remain as per the operation phase and the Lockton Compound will be returned to its existing state. • A landscape maintenance programme will be adopted to ensure the long-term survival of existing and proposed features in order to enhance their biodiversity and amenity value regardless of securing future planning permission for the well site. The details of the landscape maintenance programme will be agreed with the North York Moors National Park Authority at the appropriate time.
Air Quality	Effects from release of dust	<ul style="list-style-type: none"> • Dust produced during decommissioning and restoration regardless of whether future planning permission is secured for the well site will be controlled through the application of a series of measures incorporated into the CEMP including (where appropriate): <ul style="list-style-type: none"> - Regular inspection and, where necessary, wet suppression of material/soil stockpiles (including wind shielding, storage away from site boundaries, and restricted height of stockpiles); - Appropriate orientation of material stockpiles to minimise wind dispersion; - Provision of wheel washing and wet suppression during loading of wagons/vehicles; - Covering vehicles carrying dry spoil and other wastes; - Shielding of dust-generating construction activities; - Provision of suitable site hoarding; - Restricting vehicle speeds on access roads and other unsurfaced areas of the Assessment Site; and - Inspection of unsurfaced haulage routes, and wet suppression as necessary, during prolonged dry periods.
Noise and Vibration	Effects from noise	<ul style="list-style-type: none"> • Good practice as recommended in BS 5228-1:2009 (Ref. 16.4) will be implemented regardless of whether future planning permission is secured for the well site. Measures include: <ul style="list-style-type: none"> - Maintaining good relations with people living and working in the vicinity of site operations by keeping people informed of progress. • Quiet working methods will be adopted and implemented through the CEMP regardless of whether future planning permission is secured for the well site including: <ul style="list-style-type: none"> - The use of most suitable plant; - Reasonable hours of working for noisy operations; - Noise will be controlled at source; - On-site noise levels will be monitored regularly; - Avoidance of unnecessary revving of engines; - Switch of equipment when it is not required; - Minimise the drop height of materials; - Starting up plant and vehicles sequentially rather than all together; and

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		<ul style="list-style-type: none"> - Audible reversing alarms should be of types that have a minimum noise effect on persons outside the site. • The local authority may consider it appropriate to lay down or agree work programmes and periods of use of certain equipment regardless of whether future planning permission is secured for the well site. • Noise from construction will be controlled primarily by the restriction of working hours regardless of whether future planning permission is secured for the well site. In this case, 07.00 to 18.00 Monday to Friday and 07.00 to 13.00 Saturday.
Traffic and Transportation	Effects from traffic along Eberston Lane and Eberston Common Lane	<ul style="list-style-type: none"> • Route cards will be issued to all drivers to ensure that they use the designated access route to the Assessment Site. • All vehicle speeds along Eberston Lane and Eberston Common Lane will be restricted to 30 mph. • Large loads being moved up Eberston Lane and Eberston Common Lane will be escorted by an escort vehicle to avoid conflict with oncoming traffic.
Flood Risk, Hydrology and Drainage	Effects on surface and groundwater	<ul style="list-style-type: none"> • The CEMP will include the following measures in compliance with the Environment Agency Prevention Pollution Guidelines especially PPG 6 (Ref. 16.5): <ul style="list-style-type: none"> - The construction compound and pipe storage area works will be located within the limits of the well site, which has an impermeable membrane passing under the well site and into the perimeter ditches; - The ditch lining that is currently exposed will be protected to ensure that it retains its water retaining qualities; - During the adaptation of the existing perimeter ditch at the well site the ditches will be temporarily blocked with side of the working area to prevent accidental discharge of water or contaminants into the partly construction system or the ground; - All fuel tanks brought onto site for construction machinery will be kept locked when not being used, and sat within a containment tray in the bunded section of the Assessment Site; - Inspect all storage containers for all materials to ensure that they are fit for purpose regularly inspected and maintained; - No materials will be stored on uncovered ground; - The fuel store will be located where it is not at risk of site vehicles colliding with it; - Machinery shall be re-fuelled in the site compound where the existing site construction will provide protection to the aquifer; - Any maintenance of machinery shall be carried out within the well site to contain spillages of oil, fuel or hydraulic oil; - All cement and grout shall be stored within a contained area and all washing out of cement mixers or concrete delivery lorries must be carried out so that the discharge flows into a lined settlement pond. All tools will also be washed in a suitable area where the discharge cannot flow into the ground;

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		<ul style="list-style-type: none"> - Avoid storage of large volumes of potential contaminants such as fuel and waste water that will have a much more significant effect than smaller volumes; - All machinery left on site during construction will have drip trays placed under it; - Waste fluids arising from the testing or construction works should be taken off site and disposed of at a suitably licensed facility; - All static machinery located outside the bunded containment area of the well site during construction shall have drip trays placed under them.
Ground Conditions and Contamination	Oil, hydrocarbon and process waste contamination	<ul style="list-style-type: none"> • To mitigate the risk of pollutants entering the controlled waters, regardless of whether future planning permission is secured for the well site, handling and storage of fuels and oils will adhere to Environment Agency guidance: PPG1, PPG2, PPG5, PPG6, PPG8, PPG18 and PPG21 (Ref. 16.5). Measures to be implemented through the CEMP will comprise: <ul style="list-style-type: none"> - Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents, including locating the storage area away from the surface water drainage system and watercourses on an impermeable base, with an impermeable bund that has no outflow and is of adequate capacity to contain at least 115% of the contents; - Machinery will be refuelled using a transfer hose and valves. Trigger guns will also be protected from vandalism and kept locked when not in use; - When not operational, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics that will be checked and emptied regularly via a licensed waste disposal operator; and - An emergency spillage action plan will be produced, which site staff will have read and understood. On-site provisions will be made to contain a serious spill or leak through the use of spill kits, booms, bunding and absorbent material. Site staff will be trained in the use of emergency spill response equipment.