Application for Variation (1)

Maelor Poultry Processing Plant
EPR/ AB3591ZQ

Maelor Foods Limited
Pickhill Lane
Cross Lanes
Wrexham
LL13 0UE

14th September 2018

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1 Non-Technical Summary

Maelor Foods Limited operate an installation for slaughtering poultry and processing chicken portions in accordance with our environmental permit, reference EPR/AB3591ZQ. We are applying to vary our permit to include the following changes to our installation:

1. Addition of HGV fuelling point and fuel storage (DERV and Ad Blue)
2. Moving W2 & W3 monitoring locations to more accessible points on our site drainage system within the installation boundary
3. Addition of the odour prevention and control measures for the wastewater treatment plant as proposed under the permit improvement programme (condition IC2).

1.1 Process description

The process description of the permitted activities is unchanged. The changes to be covered by this variation are:

1. Addition of HGV fuelling point and fuel storage (DERV and Ad Blue)

The bulk storage tanks for both Diesel (DERV) and Ad-Blue will serve an adjacent HGV fuelling point, with all facilities inside the installation boundary.

We are aware of the pollution risks posed by this facility to water and land and have designed the facilities so as to comply with the provisions of the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016 and The Environmental Permitting (England & Wales) Regulations:

Bulk Storage of Diesel and Ad-Blue
The diesel and Ad-Blue storage tanks are housed above ground in the yard area to the north west of the site and both are double skinned tanks – See Appendix 1 – Figures 1, 2 & 3.

Both tanks are located in a fully enclosed concrete bund which complies with the containment criteria of the Oil Storage Regulations and we have referred to Netregs Guidance for Pollution Prevention GPP 2: Above ground oil storage tanks. All pipe work, fittings and joints are housed within the bunded area.

The diesel tank is a refurbished 45,000 litre steel tank which has been surveyed and cleaned to ensure it is fit for purpose. The Ad-Blue tank is a new 5,000 litre polyethylene tank. The inspection report for the DERV tank is in Appendix 2.

Both tanks are clearly labelled with the tank contents / capacity and have level gauges to allow personnel and contractors to observe the levels and measure the volumes in the tanks.

The fill points for both tanks are contained inside the concrete bund and are kept locked at all times except for offloading deliveries.

Isolation valves and vent pipes for both tanks are inside the bund and the Ad-Blue tank also has an automatic overfill protection device. As the level gauge for the DERV tank is clearly visible from the delivery point we have not installed an automatic overfill protection device as this is not mandatory.

There are no surface water drains in the immediate delivery area for the tanks and the surface water drains serving this yard area and nearby weighbridge are fed through a 12,000-litre oil interceptor.

Diesel dispensing pump station

The diesel dispensing pump station for fuelling HGVs is located approximately 30 meters south west of the bulk diesel tank and is housed inside a concrete bund to add protection from collision and containment of minor drips. See Appendix 1, Figure 5.

Steel pipework from the DERV tank to the dispensing pump runs above ground alongside the perimeter walkway and will be contained inside a retaining kerb to be installed along the grassed border - See Appendix 1, Figure 4.

The pipe will be visually inspected during routine site inspections and included on routine maintenance checklists.

The diesel dispensing pump can only be operated with the use of an authorised fob and separate password. Fobs can be disabled centrally through a cloud-based fuel management system restricting access for unauthorised users further. This essentially locks the pump to unauthorised users.

The diesel dispensing pump nozzle is fitted with an anti-drip nozzle attachment and a 180-litre diesel spill kit is readily available in the immediate area to allow a clean-up / containment in the event of a spill. The dispensing pump has been fitted with a failsafe device that uncouples the hose from the pump should the driver accidentally drive away with the hose still inside the vehicle fuel tank.

A surface water drain located near to the diesel dispensing pump flows into the 12,000-litre oil interceptor. Any run off from areas not captured by this drain leads to trade effluent drains that feed into the onsite wastewater treatment plant.

Ad-blue dispensing

Based on current fleet mileage and fuel consumption we estimate that each vehicle will need to use the Ad-Blue dispensing area once per week.

The dispenser hose length from the Ad-Blue tank does not extend beyond the confines of the bunded area so the drivers must dispense Ad-Blue into a 15 – 25 litre “jerry can” drum within the confines of the concrete bunded area. The drivers will then dispense the Ad-Blue from the drum directly into their vehicle Ad-Blue tank.

The jerry can drums will be high-density polyethylene, polypropylene or stainless steel only in order to reduce the likelihood of corrosion and will be fitted with an anti-drip nozzle attachment.

Spill response, security and operational procedures

A 240-litre Ad-Blue spill kit and a 180-litre diesel spill kit will be readily available by the bulk storage tanks and a further 180-litre diesel spill kit will be available alongside the DERV dispensing pump. This will allow for the immediate clean-up / containment in the event of a spill of either material.

The bulk storage tanks and fuelling station area will be covered by 24-hour CCTV and routine patrols are conducted in the area by security and Maelor Foods employees.

All bulk deliveries will be supervised by a Maelor Foods employee and employees responsible for supervising deliveries or handling diesel and Ad-Blue will be trained on procedures for deliveries, spill reporting and spill response.

2. Moving W2 & W3 monitoring locations to more accessible points on our site drainage within the installation boundary.

At the time of our permit application the installation was still under construction and the site drainage was not fully installed. The site drainage has been connected to existing culvert outlets to the surface water channels leading to the River Dee and these outlets were identified as W2 and W3 in the permit application and in the permit.

W2 and W3 are located outside the installation boundary and, although located on land owned by Maelor Foods, they are difficult to safely access for inspection and monitoring for oil contamination as required by the permit. Furthermore, W2 is a large culvert that takes drainage from upstream of the Maelor Foods installation, so any oil contamination could potentially be from elsewhere.

To make the inspection of the site drainage easier, safer and representative of potential oil contamination from only the installation we have identified new inspection points for W2 and W3. These points are downstream of our oil interceptors and any areas where oils may be present. See the revised site drainage plan showing the revised locations in Appendix 3, Figure 1. The revised installation plan shows the new locations in Figure 2 in Appendix 3.

3. Addition of the odour prevention and control measures for the wastewater treatment plant as proposed under the permit improvement programme (conditions IC2 and IC3).

The changes to improve the odour prevention and control at our wastewater treatment plant are being undertaken as part of our ongoing environmental improvements under the permit improvement programme. These changes have been discussed and negotiated with our local NRW Regulatory Officer. We are now applying to formally include these changes in our permit.

Permit improvement condition IC2 required a review of our odour impact assessment by undertaking an operational olfactometry survey of our main odour sources. The report for IC2 is included in Appendix 4.

The conclusions from the study were reviewed and a series of recommendations were prepared to address the main issues identified and submitted alongside the report for IC2 – see Appendix 5.

The olfactometry study found that the fugitive releases from the primary balance tanks at the WWTP are amongst the most intense and offensive odorous from the installation. Measures to prevent these tanks becoming septic and to minimise the intensity of odour have been taken and include:

- minimising the loss of solids to drains in the slaughterhouse by improving operating procedures, staff training and filtration systems
- lowering the height of wastewater held in the primary tank(s) and increasing the frequency of emptying and cleaning the tanks

However, odours from these tanks could still potentially contribute to offsite odour episodes so we have / are installing covers over these tanks and will draw the air from the headspace

under the covers through a passive carbon filter. The outlet from the filter will be discharged to air. Schematic diagrams of the tanks and carbon filter unit are shown in Appendix 3, Figures 5, 6 & 7.

Other than these changes the operation of the installation is unchanged.

1.2 Environmental setting

There are no changes to the environmental setting of the installation.

2 The Permit Installation

2.1 Plans and drawings

The revised installation plan in Appendix 3, Figure 2 shows the new DERV fuelling facility, revised surface water discharge points W2 & W3.

Figures 3 & 4 in Appendix 3 show the location of the new DERV stores and fuelling point and the layout and local drainage.

2.2 Licensing history

The Maelor Poultry Processing Plant installation was permitted under the EPR Regulations on 29th August 2017 under permit reference EPR/EP3835GD and is issued to Maelor Foods Limited.

This is the first application for a variation to the permit and there have been no other variations to the permit to date.

2.3 Proposed changes to the permit

The prescribed activities undertaken at the installation are essentially unchanged.

The new DERV and AD-blue storage and fuelling point is not a directly associated activity to the permitted activities but NRW have asked for this to be included in the permit as it is located inside the installation boundary and poses a potential pollution risk to surface and groundwaters which are sensitive at this location.

The changes to the location of surface water discharge monitoring points are for practical and administrative purposes only and do not change the risk to the environment.

The odour abatement associated activities are being revised for the wastewater treatment plant as part of the permit improvement programme.

We have confirmed with NRW's permitting team that these changes are covered by a minor technical type of variation as per NRW's guidance on fees for environmental permitting.

The changes we would like to make to our permit are:

a) Table S3.1 in Schedule 4 to include new emission point to air for the carbon filter outlet on wastewater treatment plant odour abatement unit as below:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission Point Ref & location	Source	Parameter	Limit (inc unit)	Reference period	Monitoring frequency	Monitoring standard or method
Air outlet from primary balance tanks vent	Wastewater treatment plant primary balance tanks emission vent (after passing through activated carbon filter)	No parameter set	No limit set	-	-	-

b) The installation plan has been updated to show the new surface water monitoring locations for W2 and W3. This is provided in Appendix 4 and should replace the site plan shown in Schedule 7 of the permit.

3 Emissions to the Environment

The emissions from the installation associated with the changes proposed by this variation application are discussed below. The proposed monitoring for these discharge points is shown in Section 12 and the environmental impact assessment of these discharges is provided in Section 13.

3.1 Emissions to air

The new point source emissions to air associated with this variation application will arise from the sources listed below in Table 1. This emission point location is not marked on the installation plan. This is consistent with the similar unnumbered vents in permit Table S3.1.

Table 1 - Air emission points

Emission point Ref & location	Parameter	Source	Quantity / Unit
Air outlet vent from carbon filter serving WWTP primary balance tanks	Odour	WWTP Primary balance tanks headspace	Unmeasured odour units

3.2 Emissions to water, land & sewer

There are no new point source releases to water, land or sewer from the installation.

4 Management Systems

The installation and facilities are operated in accordance with our Operating Procedures, Quality Documents and our internal EMS which includes our environmental related procedures, plans and registers.

The management systems that address the changes covered by this variation are listed below and have been updated to address the changes:

- Odour management plan revised to include the changes to odour control on the WWTP primary balance tanks
- Environmental impact assessments and the Aspects and Impacts Register revised to include:
    - new fuel store and fuelling point aspect and impact
    - WWTP odour sources revised for primary tanks
- Compliance obligations register revised for Oil Storage Regulations to include new fuel store and fuelling point.
- Daily / weekly site checks undertaken revised to include checks of:
    - carbon filter on WWTP primary tanks
    - fuel store and dispensing point
    - surface water drainage outlets W2 and W3
- Accident management plan revised to include hazards and inventories associated with new diesel and ad-blue tanks
- Spill response, fuel delivery and refuelling procedures revised or added to cover new fuel store and fuelling point
- Training of staff undertaken on the revised procedures

A documented preventative maintenance system is in place and the new facilities are included. Key plant, equipment, alarms and key spares are held and documented.

Copies of these documents and associated records are available on request and will be readily available for viewing by our NRW Regulatory Officer.

5 Operating Techniques & BAT

We have referred to the following Guidance Notes to assess the best techniques to be used for the changes to our activities covered by this variation application:

Netregs Guidance for Pollution Prevention:

- GPP 2: Above ground oil storage tanks
- PPG 7: Safe storage - The safe operation of refuelling facilities

Slaughterhouse & Animal By Products BREF
Food Drink & Milk BREF
Environment Agency Guidance EPR 6.11 Treating & Processing Poultry

There are no changes made in the following process areas:

- Delivery & lairage
- Stunning and bleeding
- Scalding
- De-feathering
- Evisceration
- Chilling
- Meat cutting and portioning
- Animal by-products and blood storage and handling
- Waste management
- Utilities

5.1 Cleaning

There are no changes made in this area, but operating procedures have been tightened and training of staff refreshed to minimise the washing of solids into the trade effluent drains.

5.2 Wastewater emissions and effluent treatment

The operations and procedures for the primary tanks have been reviewed as part of the recommendations of improvement programme report IC2.

As part of this the schedule for cleaning the primary tanks has been revised and is kept under review to monitor operational and odour control performance.

The wastewater screens in the slaughterhouse have been optimised to remove solids and prevent this material entering the primary tanks.

The main change is that the primary balance tanks have / are being covered. We have agreed the installation schedule for the covers with our local NRW Officer. We will install the cover on the divert balance tank first and then switch the raw effluent feed to that tank before fitting the cover on the primary balance tank. We expect both tanks to be covered by around the end of September.

We have been advised by the system designers that the tank aeration blowers will cause the headspace air to be drawn into the passive carbon filter we are installing to abate the headspace air of odour.

However, if operational experience shows that additional extraction fans are needed to draw air from the headspace under the covers through the carbon filter we can easily retrofit this. The treated air is vented to air.

We would also like to point out that the original permit application proposed the installation of an alarm(s) to warn of a rapid drop in level on the primary tanks to warn of a catastrophic tank failure. These have not been installed as the WWTP area has now been bunded by an earth bund to provide containment and contingency in emergency scenarios such as this. We have level sensors on all the WWTP tanks and monitor this through the DCS.

Table ***2*** below outlines the revised BAT measures for primary treatment of wastewater:

Table 2: Primary wastewater treatment BAT

	Indicative BAT	Maelor Foods	Aspect
Reception and balance tanks	New balance or reception tanks should be covered or fitted with a lid to minimise odour.	Existing unlidded tanks are being retrofitted with covers.	Odour
	Tank internals should be cleaned at regular intervals to prevent the build-up of solids and fat.	Yes – part of maintenance / housekeeping procedures	Odour
	The tank should be agitated to prevent settlement of solids.	Yes, and level in tanks to be managed at lower levels	Odour
	Low level alarms should shut off pumps to avoid excessive solids being pumped into the treatment plant.	Yes	Effluent
	Above ground tanks should be bunded.	Earth bund around entire WWTP area. Hard standings drain into sump for processing in the WWTP with slopes and kerbing to prevent run off.	Water

5.3 Raw materials

New raw materials will be used at the new fuelling facility:

- Diesel (45,000 litres storage capacity)
- Ad-blue fuel additive (5,000 litres storage capacity)

All the new raw materials are stored in accordance with any specific legislative criteria and in a manner to prevent and minimise the potential for spillages of polluting materials escaping into the environment. Our management systems address receipt and storage and handling of raw materials. Our site inventories will be way below the relevant thresholds set in the COMAH Regulations for fuel storage.

We will keep track of fuel and additive usage to monitor fuel consumption performance of the HGVs as part of our EMS.

Note also that the chemicals used in the scrubber and the cleaning chemicals are now stored in double skinned bulk tanks along with the cleaning chemicals Tribac and Ultrafoam. See photograph of new tanks – Appendix 1 – Figure 6.

The tanks will be protected by a crash barrier that has been installed.

Our permit application described this technique and the use of IBCs.

5.3.1 Potential pollution risk of raw materials

The potential pollution risk of the new raw materials, their applications and approximate annual consumption is summarised in Table 3 below. Figures 1 and 2 in Appendix 6 show the raw material information and MSDSs for the new raw materials.

Table 3 - Raw material pollution risk by application

Application	Purpose	Materials used	Hazardous substance	Environmental fate	Potential pollution risk	Storage arrangements	Delivery and use details	Inventory
Fuel	Fuel for HGVs	Diesel	Yes	May cause long-term adverse effects in the aquatic environment. Not readily degradable in water	Yes	Bunded and double skinned tank, above ground pipes and	By road tanker	45,000litres
Fuel additive	Increases fuel economy	Ad-Blue		Contains ammonia which is toxic to fish and other aquatic life. Readily degradable in water	Yes	Bunded and double skinned tank	By vehicle / unloaded by fork truck	5,000litres
Cleaning applications	Cleaning of vehicles, crates, process equipment & floor areas	Tribac		Biodegradable	Yes	Double skinned tank	By vehicle / unloaded by fork truck	3,000 litres
		Ultrafoam						5,000 litres
Odour abatement	Chemical scrubber	Sodium hypochlorite		May cause long-term adverse effects in the aquatic environment. Readily degradable in water	Yes	Double skinned tank	By vehicle / unloaded by fork truck	5,000 litres
		Sodium hypochlorite						5,000 litres

Table 4 below outlines the BAT measures for raw materials consumption, storage and handling:

Table 4 - Raw material consumption BAT

	Indicative BAT	Maelor Foods	Aspect
Consumption	Record and monitor consumption rates routinely. Undertake planned reviews of raw materials consumption.	Included in management systems. Consumption to be reviewed regularly	Resources
Storage & handling	In accordance with Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016	As per Netregs guidance GPP2 and PPG7	Resources, Water, Land, Accidents

5.4 Site drainage

There are no changes to the site drainage. The location of the monitoring points W2 and W3 on the surface water drainage have been moved to more convenient location inside the installation boundary where we can monitor for any signs of oil contamination from our activities. See the new locations on the site drainage plan and installation plan in Appendix 3, Figures 1 & 2.

6 Odour Control

Some of the activities undertaken at the installation are inherently odorous to some extent and there have been some odour complaints attributed to the installation. However, these have not been reliably substantiated and may be related to other offsite sources.

Our study undertaken for improvement programme condition IC2 identified that the wastewater treatment plant primary balance tanks were a source of high odour levels – see Appendix 4. This was exacerbated due to the excessive build up of solids in the tanks and septic conditions that had subsequently developed.

A series of recommendations were made under IC2 – Appendix 5. Having cleaned out the tanks and revised operational procedures for solids prevention and tank level operation the odour from these tanks is now less offensive. However, we recognise that the odour potential from these tanks is still high and that covered tanks may represent BAT where odour complaint potential is high.

We have therefore chosen to install covers over the primary tanks as an additional precautionary measure with the headspace air under the covers treated via a passive carbon filter.

6.1 General measures & management

Odour Management Plans (OMP) are required for installations permitted under the Environmental Permitting (England and Wales) Regulations 2010 (as amended) (EPR) if the activities undertaken at the installation have significant potential to cause odour nuisance.

Activities for slaughtering poultry have an inherent significant odour nuisance potential so we prepared an OMP for our permit application and updated this into an operational version.

Improvement programme condition IC3 requires the OMP to be reviewed after completing IC2. The revised version in Appendix 7 covers the changes made on operation and infrastructure of the primary tanks at the wastewater treatment plant.

Our OMP identifies all potentially significant sources of odour at our installation. It describes the management practices and the infrastructure we will have in place to prevent and minimise those sources of odour.

The OMP addresses the potential for odorous emissions over our full range of normal operating conditions. It also covers our contingency measures to minimise odorous emissions during foreseeable abnormal and emergency events that could occur.

Our planned management systems to monitor, record and review our odour control performance are incorporated into the OMP. The plan describes the measures we intend to take if excessive odour is reported or detected during our monitoring or if we receive an external odour complaint.

The OMP will be reviewed regularly and includes odour report investigation procedures.

Table 5 below outlines the BAT measures for odour management:

Table 5 - Odour management BAT

	Indicative BAT	Maelor Foods
Management	Implement an effective Odour Management Plan to identify all potential sources of odour and the measures needed to minimise them during normal and abnormal operation.	Yes – OMP in place.
	Operating procedures should include odour control measures.	Operating procedures include the odour control measures.
	Staff training and awareness of odour issues is essential.	Staff are trained on this.
	Housekeeping and maintenance standards need to be high in areas where odour can arise and be released.	Operating procedures address housekeeping. Preventative maintenance system include plant which can affect odour.
	Where there is a history of odour complaints positive community liaison will be beneficial.	We engage with our neighbours and provide feedback to them on any complaints they make about our operations.

6.2 Comparison of odour abatement techniques

The headspace beneath the covers on the primary wastewater treatment plant tanks is likely to be more concentrated after fitting the covers and so will need to be extracted and abated. The abatement techniques available for this are discussed briefly below.

6.2.1 Thermal oxidation

Unsuitable for this application – excessive costs and no use for waste heat.

6.2.2 Bio-filters

Unsuitable for this application – insufficient space available to install and high costs and ongoing maintenance required.

6.2.3 Chemical scrubbers

Potentially suitable but high costs and use of chemicals required. Existing chemical scrubber is too far away to divert into.

6.2.4 Carbon filters

Carbon filters are suitable for abating passive emissions from tank headspaces and are relatively inexpensive and low maintenance options.

Media typically requires replacement every 6 months. We are aware that moisture can affect the performance of carbon filters.

6.2.5 Odour neutralisers

Odour neutralising or eliminating chemicals can be used to neutralise odours by removing them from the air, rather than simply masking the unwanted odour. They are used in a variety of industrial applications and use bio-degradable essential oils collected from sustainable resources.

Neutraliser is typically pre-diluted and then injected into the air stream by an atomiser to create a fine-mist. They attack the odorous molecules present in the air stream.

Odour masking sprays are sometimes used as an additional level of control to disguise odours above ABP trailers or skips but are not to be relied upon as a primary control measure.

We do not think odour neutralisers or masking agents are suitable for this application.

6.2.6 Other odour abatement techniques

Ozone, high voltage and thermal plasma systems can also be used for the oxidation of odour molecules. High voltage systems are used in food and drink sector applications such as feed mills and AD plants.

The installation and running costs are higher than the traditional alternatives discussed above and therefore unsuitable for this application.

Table 6 below summarises the techniques we have considered.

Table 6 - Odour abatement options

	Applicable for Maelor Foods?
Combustion methods	Discarded - very expensive and energy intensive
Bio-filters	Discarded – expensive, space restrictions, energy and water requirements and day to day maintenance required
Chemical scrubbers	Discarded - expensive, energy and water requirements and day to day maintenance required
Carbon filters	Candidate

	Applicable for Maelor Foods?
High voltage, plasma, ozone, UV	Discarded
Odour neutralisers	Discarded

6.3 Selection of odour abatement techniques

Based on the options available we have decided to draw the air from the tank headspace beneath the covers into a passive carbon filter.

6.3.1 Carbon filter design & overview

We have been advised by the system designers that the balance tank aeration blowers will cause the headspace air to be drawn into the passive carbon filter we are installing to abate the headspace air of odour.

However, if operational experience shows that additional extraction fans are needed to draw air from the headspace under the covers through the carbon filter we can easily retrofit this. The treated air is vented to air.

See the design and layout drawings in Appendix 3, Figures 5, 6 & 7.

We will monitor the carbon filter performance with routine checks and sniff tests and repeat the olfactometry survey if we continue to receive odour complaints that may be attributed to the wastewater treatment plant area. These inspections will also check for excessive moisture in the filter. Should this prove to be an issue we will look at mechanisms to remove moisture upstream of the filter or other available solutions.

7 Noise & Vibration

There are no significant additional noise sources introduced by the changes covered by this variation application.

There are no additional vehicle movements other than for diesel and Ad-Blue deliveries which are to be around once every 6 – 8 weeks approximately.

The covers over the WWTP primary tanks will provide some sound insulation for the aeration systems on the tanks. This is a remote area however and is not likely to add any significant noise control benefit.

8 Energy Efficiency

The energy efficiency of the permitted activities is not significantly affected by the changes covered by this variation application.

There will be an extra fan to extract air from the WWTP tank headspace and pumps serving the fuelling point, but these are minor in the overall scheme of the installation's energy use.

The use of AD-Blue fuel additive to the HGVs will increase the fuel efficiency of the vehicles and is widely used in the haulage industry.

9 Water Consumption

Our water consumption is unchanged by the changes covered by this Variation Application.

10 Accidents and emergencies

We have an emergency response plan under our EMS for dealing with any incidents or events that we identify as having the potential to harm the environment. Our Plan considers the potential accident and abnormal events that we have identified and the measures we should take to prevent or deal with them.

The changes covered by this Variation Application introduce new hazards associated with the bulk storage and handling of diesel and Ad-Blue which contains ammonia.

Our emergency response plan has been revised to address the accident scenarios whereby major spillages / loss of containment of these materials could potentially affect the River Dee or the underlying aquifer. Both receptors are very sensitive, so these scenarios could have a high environmental impact.

Our ERP considers:

- likelihood of these accidents happening, considering controls in place.
- consequences of these accidents happening, ranging from worst case if controls and mitigation measures fail to less severe if mitigation measures are effective.
- measures to take to avoid these accidents happening such as the design of containment systems, interceptors and operational and maintenance procedures
- measures to take to minimise the impact if these accidents happen such as spill response procedures and staff training

Associated procedures to the ERP include:

- Spill response procedure
- Bulk chemical and fuel deliveries procedure
- Vehicle fuelling procedure

Copies of these documents and associated records are available on request and will be readily available for viewing by our NRW Regulatory Officer.

11 Site condition report

The new fuel store and fuelling point has been constructed within the existing installation boundary so there are no additional site investigations required.
The application site report (ASR) investigated historic hydrocarbon contamination levels, so we have baseline data for these substances. There were no ground contamination issues during the construction work for the facility.

11.1 Closure and Permit Surrender

There are no changes required to our site closure plan as this will cover the emptying of tanks, bunds and associated pipework upon closure.

12 Monitoring

There are minor changes under this variation application to the permit monitoring criteria.

The weekly visual inspections of surface water outlets W2 and W3 will continue but will be made at the new locations within the installation boundary.

The outlet from the carbon filter serving the air extraction unit will be vented to air. Visual and sniff inspections of the unit will be made under our routine site checks. We will not undertake any quantitative monitoring or sampling of this point.

13 Environmental impact assessment

We have reviewed our environmental impact assessments along with the review of our Aspects and Impacts Register to assess the potential impacts from the new aspects introduced by this variation.

13.1 Protection of the underlying aquifer / surface waters

The site is located on a groundwater source protection zone aquifer (Zone III, total catchment). The installation is also located within the 'Middle Dee Groundwater Management Unit' of the Dee Catchment Abstraction Management Strategy (CAMS).

The site drainage from the installation will ultimately feed into the River Dee, a sensitive watercourse with downstream potable extraction and a Special Area of Conservation (SAC) for its Atlantic salmon and water plantain populations.

Our qualitative impact assessment shows that to be a Low to Medium Risk of harm to these sensitive receptors from the proposed new activities to be undertaken at the installation.

The technical and procedural controls we will use to operate and monitor the installation should ensure that these risks are well managed and acceptable.

13.2 Odour nuisance potential

The revised arrangements for covering of the wastewater treatment plant primary balancing tanks have been designed to reduce the risk of offsite odour nuisance from this source.

The environmental risk assessment has been revised according to these new arrangements.

Appendices