Unit 1009 Permit Application

Contents

Refusal of a bespoke permit application

We have decided to refuse the permit application for Unit 1009.

The applicant is Mr Simon Stone. We refer to Mr Simon Stone as **"the applicant"** in this document.

Mr Simon Stones' proposed facility is located at Unit 1009, Caerwent Army Training Estate, Caerwent, Monmouthshire, NP26 5XL. We refer to this as "**the proposed facility**" in this document.

What this document is about

This is a decision document which details the determination of the above permit application.

It explains how we have considered the applicant's application, and why we have refused to grant a permit. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our decision.

This decision document only discusses the reasons for refusal to grant a permit. Where details are not discussed in this document it means that we have considered the application and accepted the details are sufficient and satisfactory.

We consider in reaching that decision, we have taken into account all relevant considerations and legal requirements.

Preliminary information and use of terms

We gave the application the reference number **PAN-000167**. We refer to the application as **"the application"** in this document in order to be consistent.

The application was considered to be duly made as of 01 April 2016.

Key issues of the decision

1 Our decision

Based on the information currently available to us we are refusing the permit application.

We carefully considered the application and all other relevant information before we reached a decision. Having considered the information submitted with the application and further information submitted during the determination, we are not satisfied that appropriate infrastructure will be in place.

Our decision has been influenced by the following principals:

- **The proposed activity in the proposed location, given the sensitivity of the location on a Principal Aquifer and a Source Protection Zone 1 (SPZ1).**
- **The inadequate infrastructure of the proposed facility and the unacceptable risk to groundwater within this SPZ1 that this activity may cause, in particular from the discharges of potentially contaminated run-off into a dry ditch and leachate seeping to ground from potentially contaminated soils stored on site.'**
- **Position G4 (Trade effluent and other discharges inside SPZ1) from our Groundwater Protection: Principles and Practice (GP3) apply to this operation. Position G4 states: *"Inside SPZ1 we will object to any new trade effluent, storm overflow from sewer system or other significantly contaminated discharges to ground where the risk is high and cannot be adequately mitigated. If necessary, we will use a prohibition notice to stop any such existing discharge."***
    - **The site drainage that the applicant proposes to use is not considered to be impermeable and our position statement G4 of GP3 *(as included above)* applies.**

  We are therefore unable to grant a permit for this activity in this location, given the inadequate infrastructure and risk to groundwater.
- **The applicant intends to make improvements to the infrastructure and drainage of the site "*pending agreement on the lease with the MoD*". As a lease agreement is not currently in place between the land owner and the applicant, we do not have confidence that the applicant will be able to meet the definition of the 'operator' if they do not have agreement to operate on the site.**

2 How we reached our decision

2.1 Receipt of application

On 04 March 2016 Mr Simon Stone submitted a Tier 2 bespoke permit application. A Tier 2 bespoke permit is based on a standard rules permit and can be applied for when the proposed facility does not meet the location criteria for a standard rules permit. The application was for a Tier 2 bespoke permit based on standard rules permit 2010 Number 12 – the treatment of waste to produce soil, soil substitutes and aggregates. The application included a completed signed declaration by the applicant, confirming that their facility fully meets the standard rules that they have applied for.

The application was accepted as duly made on 01 April 2016. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination. Further information was requested during the determination and this is explained in this document.

The applicant made no claim for commercial confidentiality. We have not received any information in relation to the application that appears to be confidential in relation to any party.

2.2 Consultation on the application

We placed a copy of the application and all other documents relevant to our determination on our electronic Document Management System which acts as our Public Register. Anyone wishing to see these documents could do so on request and arrange for copies to be provided.

We consult with other bodies as per our working together agreements. Listening to others helps us to make better decisions. We make use of the expertise of others and make sure we have taken into account all the environmental risks. We sent copies of the application to the South Wales Fire and Rescue Service. Following this consultation, no comments were received.

2.3 Requests for further information

Request for Information at Duly Making Assessment Stage
In order for us to be able to consider the application duly made, we needed more information. We requested further information relating to the fee, incomplete application form Part B2 section 3d, permitted site boundary and evidence of technical competence. Upon receipt of this information we were able to consider the application duly made.

During the application determination process, we are able to request further information that we require in order to complete our determination. We can do this formally or informally.

When we request information formally we do this by serving a 'Schedule 5 Notice' to the applicant. A Schedule 5 Notice is a legal notice that clearly specifies what information we require to determine the application, why we need that information and by when the applicant must submit the information. The applicant must provide all of the information specified in the notice.

Informal Request for Information (dated 11 May 2016)
An informal request for information was sent to the applicant via email on 11 May 2016 requesting the following:

- Evidence of continuing competence for Mr. Simon Stone to satisfy the requirement of technical competence.
- Revised environment management system (EMS) to change the name of Regulator from the Environment Agency to Natural Resources Wales.

The applicant submitted details of the continuing competence award to us on 01 June 2016. **The applicant did not submit a revised EMS as requested by the informal request sent 11 May 2016.**

Informal Request for Information (dated 06 June 2016)
An informal request for information was sent to the applicant via email on 11 May 2016 requesting a newt mitigation strategy. We also reminded the applicant that we had not received a revised EMS and continuing competence certificate, as requested 11 May 2016. We requested all of this information to be submitted within 10 working days (by 20 June 2016).

The applicant submitted a certificate of continuing competence for Mr. Simon Stone on 16 June 2016. This evidence satisfied the requirement of technical competence for the activity and the application.

The applicant did not submit a newt mitigation strategy to us by the deadline (20 June 2016).

Schedule 5 Notice 1 (dated 05 July 2016)
As the applicant did not provide information to the informal information request sent 06 June 2016 we requested this information via a Schedule 5 Notice sent on 05 July 2016, with a deadline of 02 August 2016.
The Schedule 5 Notice requested the following information:

- Revised environment management system (EMS) to change the name of Regulator from the Environment Agency to Natural Resources Wales.

- Newt mitigation strategy

The applicant's response to the Schedule 5 Notice was provided on 26 August 2016. Although the additional information supplied by the applicant satisfied the requirements of the Schedule 5 Notice issued on 05 July 2016, we assessed the newt mitigation plan and overall did not consider it to be suitable for the proposed activity. Please see section 5.5 – newt mitigation strategy for further explanation.

Informal Request for Information (dated 26 July 2016)
During a telephone conversation with the applicant during the week commencing 18 July 2016, they confirmed that they would not be able to meet the drainage requirements as specified in the standard rules set and also advised that the proposed activity would include a waste transfer activity. We explained that if the applicant could not meet the Tier 2 bespoke permit requirements that they would need to amend their application to a full Tier 3 permit, or withdraw their application.

We sent an informal request for information to the applicant on 26 July 2016. We informed the applicant that as the proposed facility could not meet the drainage requirements that they must provide information with a Tier 3 bespoke application demonstrating how they would ensure that the proposed activities and the drainage proposals will not have an adverse impact on the environment and human health.

Within the informal written request for information, we advised the applicant that in revising their application to a full Tier 3 bespoke permit that they must submit the following information:

- Tier 3 bespoke permit application forms
- An Operational Risk Appraisal (OPRA)
- Additional fee based on OPRA
- Site condition report
- Non-technical summary
- Environmental Management System (EMS) Summary
- List of wastes proposed to be accepted on site, and;
- Any other site specific risk assessment that are relevant to the activities.

We reminded the applicant that we had not received a response to the Schedule 5 notice dated 05 July 2016 in which we requested a newt mitigation strategy and that failing to provide a response or an extension request to provide the information, would result in us determining the application based on the information provided to date, which *may* result in application being refused.
The applicant did not submit the information to the informal request for information, dated 26th July.

At the request made by the applicant a site visit was carried out on 10 August. At this visit we reminded the applicant that they needed to submit the application forms and supporting documents for a Tier 3 bespoke permit.

Schedule 5 Notice 2 (dated 05 September 2016)
As the applicant did not provide information to the informal information request, we requested this information via a second Schedule 5 Notice sent on 05 September 2016 with a deadline of 19 September 2016.

The applicant's response to the Schedule 5 Notice was provided on 19 September 2016. The additional information supplied by the applicant did not satisfy all of the requirements of the Schedule 5 Notice issued on 05 September 2016. On 23 September 2016 we reminded the applicant via email that several pieces of information were still outstanding from the Schedule 5 notices sent on 05 July and 05 September (*the deadlines were 02 August and 19 September respectively*). Our letter dated 05 September confirmed that failure to submit this information by the required date *may* result in the application from being deemed withdrawn. We gave the applicant a final opportunity to fully respond to the Schedule 5 notices by submitting all of the outstanding information within the following 10 working days (by the end of Friday 07 October). We advised the applicant that failure to submit all of the information would result in the application being deemed withdrawn.

The applicant submitted revised versions of their EMS, drainage plan, site specific risk assessment, newt mitigation strategy, OPRA profile and application form Part B4 on 07 October 2016. The applicant submitted revised versions of their non-technical summary and site condition report on 10 October. All of this information was submitted in response to the Schedule 5 Notices.
Although the additional information supplied by the applicant satisfied the requirements of the Schedule 5 Notices issued on 05 July and 05 September 2016, we assessed these plans and overall did not consider them to be suitable for the proposed activities. Please see section 5 for further explanation.

Schedule 5 Notice 3 (dated 09 November 2016)
Following receipt of the revised versions of the site condition report and EMS, we required further clarification from the applicant and a third Schedule 5 Notice was sent on 09 November 2016 requesting the following:

- Detailed drainage plan
- Site condition report highlighting the SPZ1 and associated risks to groundwater.
- Confirmation if a survey of this drainage network had been undertaken to demonstrate that all pipework is sealed and leak free.
- Evidence that all pipework is sealed and leak free – *if a survey had been carried out.*

- Evidence that the attenuation pond is suitably lined and impermeable.
- Detailed groundwater risk assessment and full details of how contaminated water would be captured and treated prior to any discharge taking place, in order to allow any trade effluent to be discharged to ground.
- Revised EMS to include measures to prevent contamination to the watercourse that runs through the site.
- Revised fire prevention and mitigation plan that only includes the wastes to be accepted at the site.
- Confirmation if the detection system linked to the main MOD security.
- Information on how fire water run-off will be managed. As this area does not have an impermeable surface the fire water will percolate the surface of the site and run into the groundwater.

The deadline of the Notice was 24 November 2016. The applicant did not provide the information by the deadline and following a request made by the applicant we extended the deadline to 05 December 2016. The applicant failed to submit all of the information by the extended deadline.

On 17 January 2017, we wrote to the applicant and informed them of the information outstanding from the Schedule 5 Notices dated 05 September and 09 November 2016. We reminded the applicant that the information requested was to address our concerns with regards to the inadequate site infrastructure and drainage that is currently in place given the sensitivity of the site location within a Source Protection Zone 1 (SPZ1).
We advised the applicant that on the information provided to date, we do not consider that the infrastructure as suitable for proposed activities, at this location.

The outstanding information from the Schedule 5 Notices included the following:

- *Detailed drainage plan, as the plan provided does not show the drainage network as a whole.*
- *Site condition report using our template, highlighting the SPZ1 and associated risks to groundwater. The information provided is an improvement on the previous submission and provides greater clarity on how the site will be drained. However, there remains concerns over the risks to groundwater within this Source Protection Zone 1 (SPZ1), in particular from the discharges of potentially contaminated run-off into a dry watercourse. There is a lack of information to demonstrate that the attenuation pond and bypass oil separator can provide a sufficient level of treatment prior to discharge to ground occurring. No assessment of the risks to groundwater in the SPZ1 from run-off infiltrating to ground through the base of the watercourse when dry has been provided.*

- *Confirmation if a survey of the drainage network has been undertaken to demonstrate that all pipework is sealed and leak free has not been confirmed. This is unclear as the drainage strategy submitted states that a survey has been completed, but the EMS states that a survey will be carried out.*
- *If a survey has been carried out please provide evidence that all pipework is sealed and leak free. This has not been provided. If it has been carried out we have not received the evidence requested.*
- *Evidence that the attenuation pond is suitably lined and impermeable.*
- *Proposed control measures to provide groundwater protection from contamination percolating through the hardstanding and leaking from the onsite drainage system to ground.*
- *In order to allow any trade effluent to be discharged to ground please provide a detailed groundwater risk assessment and full details of how contaminated water would be captured and treated prior to any discharge taking place.*
- *Confirmation where the water from the jet washing of vehicles will be discharged to and what measures you will have in place to contain this run off.*
- *As there is no baseline monitoring please provide an explanation as to how you have come to the assumption that there is no contaminated land within the permit boundary.*
- *A groundwater risk assessment document demonstrating as to how the risks from accepting and storing asbestos will be managed.*
- *Revised odour management plan that includes how long organic waste is to be stored on site before it is removed.*
- *Revised fire prevention and mitigation plan that is produced in accordance with the current guidance and includes:*
    - *10 metre quarantine area.*
    - *Confirmation if the detection system linked to the main MOD security.*
    - *Measures to contain fire water and protect groundwater as the area does not have an impermeable surface.*

We gave the applicant a final opportunity to submit the requested information with a deadline of 20 January 2017. We reminded the applicant that failure to provide us with ALL of the requested information by 20 January 2017 would result in the application being deemed withdrawn and that we would not extend this date any further.

We also advised the applicant that if they submitted the required information that we would complete our determination on the application based on the information submitted to date. We advised the applicant that if the information submitted was not suitable or did not address all of our concerns, then we may decide to refuse the application.

Following this, the applicant submitted revised versions on 27 January 2017 of the following:

- Drainage strategy
- Site condition report (version 3)
- EMS (referenced as ‘Crownhill EMS CH012 2016 V3’).
- Fire prevention and mitigation plan (references as ‘Crownhill Unit 1009 – Fire Prevention Plan CH014 Rev 2’).

Although the additional information supplied by the applicant satisfied the requirements of the Schedule 5 Notice issued on 05 September 2016, we assessed these plans and overall did not consider them to be suitable for the proposed activity. We will explain further in section 5 – Key issues.

Copies of the information notices and e-mails requesting further information have been placed on our public register.

3 The legal framework

The application is subject to the Environmental Permitting Regulations (England and Wales) 2016. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope.

In particular, the proposed facility is:

- A *regulated facility* as defined in regulation 7 of the Environmental Permitting Regulations.
- A *waste operation* covered by the Waste Framework Directive, because it accepts waste.
- Subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which have also been considered.

4 The proposed facility

4.1 The proposed facility location

The proposed facility is located within the Army Training Estate at Caerwent, Caldicot. The army training estate is operated by the Ministry of Defence (MoD) and is predominately used for the training of MoD personnel and for the storage of MoD assets. Sections of the estate are let to companies for commercial and industrial use. Unit 1009 lies within the North West section of the estate. A section of the Dinham Meadows Site of Special Scientific Interest (SSSI) lies approximately 70m east of the site and another section 50m west. The Coombe Valley Wood SSSI also lies 600m west adjacent to the Llanmelin Hillfort. The site is located on a Principal Aquifer and within a Source Protection Zone 1 (SPZ1).

The site is around 850m from the nearest residential property, which is a farm house to the west of the site. The nearest residential area is the housing estate to the south of the training estate, 1150 m from the site border.

There is a small un-named watercourse flowing through the centre of the site in a north to south direction. This watercourse is dry for much of the year, but flows during periods of rain. Surface water runoff from the site discharges into this watercourse. The Castorogi Brook is located approximately 330m west of the site.

The site is also within 250m of protected species – Great Crested Newts (GCN).

4.2 The proposed activities

As detailed in section 2 above, the original application that was submitted was for a Tier 2 bespoke permit based on standard ruled permit 2010 number 12. The application then changed to a full Tier 3 bespoke application to include the following activities:

- Storage and treatment of inert and non-hazardous waste for the production of soil, soil substitutes and aggregates.
- Storage and treatment of treated and untreated wood for the purpose of recovery.
- Materials recycling facility for the recovery of mixed waste.

During the determination the applicant submitted revised management plans for how they proposed to carry out the activities. The following details of the proposed activities are based on their most recent proposals.

Storage and treatment of inert and non-hazardous waste for the production of soil, soil substitutes and aggregates

The proposed facility will accept material consisting mostly of construction and demolition waste with the intention to treat the waste to produce soil, soil substitutes

and aggregates. All waste storage and treatment will be carried out within the large sheds present on site. The maximum volume of 25,000 tonnes of waste materials is to be stored at any one time. Crushing and screening equipment will be used to grade and blend the materials to form the end products, which will then be stored in defined stockpiles. Inert wastes are stored in stockpiles in the open on a combination of permeable and impermeable surfaces, but processed soils are stored within the large fully enclosed sheds on site.

Storage and treatment of treated and untreated wood for recovery
The proposed facility will treat wood waste to produce woodchip which will then be used in biomass plants. Wood will be brought onto site, either as segregated wood skips or as a waste fraction within mixed waste skips. Wood will be segregated and stored on site in the open. Once a sufficient volume of wood has been stockpiled on site, a shredder will be brought to site and will shred all wood prior to onward transportation. No more than 1,250 tonnes of wood – chipped or unchipped is to be stored on site at any time. The applicant proposed to store this waste on site for no more than 6 months.

Materials recycling facility for the recovery of skip waste
Skips are received onto site from householders and commercial and are then tipped onto the processing floor within one of the buildings at the unit. Wastes are then sorted into various waste fractions prior to onward transport for recovery. No more than 800 tonnes of this waste stream is to be stored on site at any time.

5 Key issues in the determination

The key issues arising in this determination were:

- The proposed activity in the location of a Principal Aquifer and a Source Protection Zone (SPZ) 1 and the potential environmental impact on groundwater.
- The proposed facility is within 250m of priority and protected species – Great Crested Newts (GCN).
- Applicant does not hold a current lease for the area of land for the proposed facility. This is explained further in section 6 – other relevant issues.

After discussions with the applicant and their subsequent submission of revised proposals on some of the infrastructure and drainage arrangements of the site we were satisfied with the application with the exception of the following:

- Infrastructure of the site
- Drainage of the site
- Newt mitigation strategy
- Lease for the area of land for the proposed facility

We will describe these issues in more detail in this document.

5.1 The proposed facility's environmental impact

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water and discharges to ground or groundwater.

For this proposal, the principal emissions that give rise to concern are those to groundwater.

Principal Aquifers are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.

Groundwater provides drinking water in Wales, and it also maintains the flow in many of our rivers. It is crucial that we look after these sources and ensure that the water is completely safe to drink.

We have defined Source Protection Zones (SPZs) for groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. There are three main zones (inner, outer and total catchment) and a fourth zone of special interest, which we occasionally apply, to a groundwater source.

We use the zones in conjunction with our Groundwater Protection Policy to set up pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluters nearby.

Key contaminants of concern during normal operating conditions of the proposed activities will be suspended solids, hydrocarbons and leachate produced from degradation of the mixed wastes which might be received. Whilst the waste is tipped in buildings which minimises rainfall ingress, we know from previous experience of the proposed facility that the floors may not be impermeable and any run-off generated as the mixed waste degrades is collected into drains at the entrance to the building. These drains are not considered to be impermeable and are expected to leak.

5.2 Environmental Management System (dated 10/2/2017)

5.2.1 Drainage surveys

We asked the applicant to provide evidence of drainage surveys so that we could ensure that the drainage arrangements on site are sealed and leak free. This was requested in the Schedule 5 Notice 3 dated 09 November 2016.
The applicant's Schedule 5 Notice 3 response confirms that drainage surveys have not been completed in the eastern part of the site due to some of the drains being blocked by concrete. Surveys have occurred on the western part of the site but have not been pressure tested and certified as leak free.
If the applicant plans to utilise the existing drainage network they need to demonstrate that it is sealed and leak free given the sensitivity of the site within a groundwater Source Protection Zone 1.

The Schedule 5 Notice 3 response states *"pending agreement of a lease with the site owners Ministry of Defence (MoD), it is proposed to renew all site drainage with a sealed system"*.
This appears to contradict other statements in the Schedule 5 Notice 3 response and within Section 11.2.1 of the EMS where the applicant states "*discuss drainage surveys on the existing drainage network*". It is unclear if they using the existing drainage network, or installing a new sealed system for the entire site.

We detailed the need for the applicant to demonstrate the suitability of the drainage arrangements for the site in our Schedule 5 Notice 3. The applicant's response fails to demonstrate this and therefore we do not consider the drainage arrangements as suitable in order to provide protection to groundwater.

5.2.2 Attenuation pond

The applicant has confirmed that the attenuation ponds will be lined with a high-density polyethylene (HDPE) liner which will be impermeable and will reduce the risk of leakage to ground.

However, as the lease for the land has not yet been agreed with the MoD we or the applicant cannot be entirely certain that this will be done.

5.2.3 Discharge to 'watercourse'

The applicants are now stating that the feature previously referred to as a watercourse is a ditch. Nonetheless we understand this feature is still seasonally dry and is where the discharges from the attenuation ponds are being made. In our Schedule 5 Notice 3 dated 09 November we highlighted our Groundwater Protection: Principles and Practice position statement G4 concerning discharge of trade effluent to ground and the need for the applicant to provide a groundwater risk assessment. We have reminded the applicant several times of our concerns of the risks to groundwater.

We do not consider that the applicant's proposed operating techniques in their management system (EMS) are suitable or proportionate for the proposed activity and do not consider that the proposed measures will be effective in protecting groundwater. Further comments are provided in our review of the preliminary risk assessment provided.

5.2.4 Compliance limits

Section 11.3 of the EMS includes a table of proposed surface water action levels. The intention is that where the compliance limits are exceeded discharge to the drains will cease and water will be tankered off site. We support the intention behind this but as previously highlighted we do not agree with the proposed compliance limits. These limits should be set taking into account the background quality of water into which the discharge is made. Several pollutants have been given a compliance limit which exceed the relevant Environmental Quality Standards (EQS) or Drinking Water Standard (for example Total petroleum hydrocarbons (TPH) has been given a compliance limit of 50ug/l which is 5 times the EQS) which is not acceptable. Others have been set at the maximum of the relevant EQS or Drinking Water Standard.

This is also not acceptable as it could allow for deterioration in the receiving water feature from background concentrations.

5.3 Drainage strategy (dated 24/11/2016)

We support the general principal set out in the strategy where the applicant intent to safeguard the aquifer by hydraulically isolating all wastes which have potential to leach contaminants into the underlying aquifer. We also support the intention to divert as much clean rainwater away from the site activities to minimise the generating of potentially contaminated run-off.

However, we still have concerns over some aspects of their planned site drainage. We will explain further in this document.

5.3.1 Soil storage

Stockpiles of feed materials, soils and aggregates are being stored on a combination of permeable, soft covered areas and concrete slabs which are also known to be defective and considered permeable. Whilst we acknowledge the intention that these materials are inert, the drainage strategy makes several references to the possibility of the site receiving contaminated materials. The EMS references visual and olfactory assessment to identify contaminants but many contaminants would not necessarily be detected in this manner.

In this area it remains possible that contaminated runoff or leachate could be generated which will seep to ground. The groundwater risk assessment provided has not considered this risk.

In their letter sent to us 06 February 2017, the applicant stated:
"It is proposed to install an impermeable surface beneath all open areas where wastes with potential for leaching contaminants are stored, sorted and processed".

Again, as the lease for the land has not yet been agreed with the MoD we or the applicant cannot be entirely certain that this will be done.

5.3.2 Wood storage and treatment

In their revised EMS the applicant proposes to store and treat waste wood on a bunded HDPE lined area with drainage from this area being directed to sealed drainage tanks.

In a Schedule 5 summary sent to us on 06 February, the applicant confirmed:
"*Drainage from areas where treated wood is stored, is contained locally in an impermeable membrane draining to a dedicated surface drain, discharging to a sealed tank, which will be removed from site to a permitted facility or will be discharged to the mains sewer within the MoD Base, adjacent to the A48 access (pending consent from DCWW)*".

It is unclear if the liner and bunded area have been installed or if agreement form the MoD is required in order to do this.

Again, as the lease for the land has not yet been agreed with the MoD we or the applicant cannot be entirely certain that this will be done.

5.3.3 Skip wastes

The applicant has confirmed that skips containing mixed waste are tipped inside buildings and all drainage from this area is being captured and directed to a sealed drainage tank for off-site disposal. In their letter to us sent 06 February 2016, the

applicant has confirmed that "*Surfaces within buildings have been assessed as being impermeable*", however evidence of this has not been provided.

5.3.4 Hydrocarbon separator

The revised EMS and drainage plans include the use of a bypass hydrocarbon separator. We previously requested justification as to why a bypass separator is being used as opposed to a full retention. A bypass separator will allow, during period of heavy rainfall, the trade effluent to bypass the separator and discharge directly into the ditch. It is also not clear in the information provided to what limit the hydrocarbon separator will reduce hydrocarbon concentrations to and what concentration of hydrocarbon could be expected in the final effluent which is discharged to the dry ditch. There are also concerns detailed in our review of the groundwater risk assessment over the disposal of contaminated fire water from the operation. This is detailed further in section 5.4.1 below.

5.4 Preliminary groundwater risk assessment (dated 24/1/2017)

5.4.1 Sources of contamination

The groundwater risk assessment provides a history of the site and its currently environmental setting based on previous investigations. Their conceptual model notes five potential sources of contamination which have been considered further. These are:

- Leachate from treated and untreated wood
- Leachate from mixed waste
- Fire water
- Spillage of hydrocarbons
- Silt contaminated run-off

The applicant has proposed that drainage from the wood storage and mixed waste storage areas are to be drained via a sealed system to a tank for off-site disposal. Although we are satisfied with this approach we are concerned over the disposal of potential firewater produced at the site during a fire incident as the risk assessment states *"At present, this water will run either to surface water via the site drainage, or will infiltrate to groundwater".* Firewater can be heavily contaminated, therefore further information and detailed assessment is required to demonstrate that if discharged to ground, contaminants in the water would not cause pollution of groundwater. As the applicant proposes to use a bypass separator there are concerns that this system would be able to manage the potential volume of contaminated firewater entering the drainage system. This statement in the risk assessment also contradicts the applicants Schedule 5 response which references that fire water is to be sourced from tanks and ponds at the site and returned to these features via the drainage system. It's not clear how this would operate.

This is not sufficient given the pollution risk that discharging contaminated fire water to ground in an SPZ1 poses.

The risk assessment has omitted two sources of possible pollution that we have previously raised concerns over via our Schedule 5 requests. These are:

- Leachate from soil and aggregates draining to ground
- Discharge of contaminated surface run-off to the dry ditches passing through the site

Further guidance on our risk assessment requirements can be found in the Environment Agency's Horizontal Guidance H1 annex J4: groundwater risk assessment for treated effluent discharges to infiltration systems. This document is still applicable in Wales.

The risk assessment should demonstrate that hazardous substances will not enter groundwater, and non-hazardous pollutant will not enter groundwater in sufficient quantities to cause pollution.

The risk assessment provided does not consider these risks and therefore we do not consider it suitable.

5.4.2 Compliance points

The applicant proposes to utilise compliance points so *"that the site can be monitored for contamination. They must be representative of the site discharge, so location is key. It is also vital that the correct assessment criteria be used to assign the maximum acceptable values for each potential contaminant".*

The provision of a detailed groundwater risk assessment which properly assesses the potential for pollution to enter ground could potentially negate the need for these compliance monitoring boreholes.

BH7 is referenced as a compliance borehole for 'on-site' groundwater, with BH107 proposed for 'off-site'. BH7 is located towards the southern boundary of the site, around 60m to the south east of one of the discharges to the dry ditch. BH107 is referenced as an off-site compliance point but its location is not clear as the map provided in Appendix 1 is of poor quality. It appears to be around NGR ST466912 which is approximately 700m downgradient from the site. For hazardous substances and non-hazardous substance the compliance point would be 50m from the point of discharge. BH107 is therefore too far away to be considered an appropriate compliance point.

If the applicant is proposing to utilise groundwater compliance points as part of their site management then additional boreholes would be required including a minimum of 1 up-gradient and a sufficient number along the southern boundary to monitoring groundwater as it passes beneath the site. A period of monitoring to establish baseline conditions would also be required which would then be used to set appropriate compliance limit.

There remains a number of issues and inconsistencies in the information provided in the applicant's revised management systems. We have requested clarification on these issues through the Schedule 5 Notices that we have sent to the applicant. Despite this the applicant has failed to propose suitable measures to protect the risk to the environment.

The 'preliminary ground and surface water risk assessment' provided has not assessed in detail the risks to groundwater. There remains a concern over the risks to groundwater within this Source Protection Zone 1, in particular from the discharges of potentially contaminated run-off into a dry ditch and leachate seeping to ground from potentially contaminated soils stored on site.

We are therefore unable to issue permit for this activity in this location, given the inadequate infrastructure and risk to groundwater.

5.5 Newt mitigation strategy

The proposed facility is within 250m of priority and protected species – Great Crested Newts (GCN). Following the Schedule 5 Notice dated 05 July 2016, an ecologist - EcoVigour contacted NRW requesting advice on drafting the newt mitigation strategy. We advised that the following information should be included in the strategy:

- Details of the nature and extent of habitats on site and your assessment of their value for use by GCN.
- Details of the works and how these will impact the habitats present.
- Assessment of the impacts upon GCN as a result of the operations. This should consider both the terrestrial and aquatic habitats on site.
- Mitigation measures to avoid the risks of impacting GCN, particularly killing and injuring. We suggest that these should consider how to remove any GCN currently present in the proposed working areas and measures to ensure that once cleared of GCN suitable measures are in place to prevent GCN from accessing the working areas of the site.

The applicant submitted a GCN Mitigation Strategy to us on 26 August 2016 (referenced 'Great Crested Newt Mitigation Strategy Crownhill Topsoil Ltd', by EcoVigour dated 24 August 2016). We assessed the strategy and identified some concerns with a number of aspects of the strategy.
We provided detailed comments on the draft GCN Mitigation Strategy to the ecological consultants for the scheme, EcoVigour, by e-mail on 06 and 07 October 2016. These comments were provided to help the consultant complete the final strategy and included the following points:

Sections 2.2 Site Description / Habitats & 5.0 Impact assessment

The potential extent and significance of the impacts upon GCN as a result of operations is currently unclear. In order to address this we therefore advise that further information is included as follows:

- A detailed description of the extent, distribution and nature of all areas of the site that support suitable terrestrial habitat for GCN
- A detailed assessment of the value of each of these habitats/features for GCN and the likely nature of their use by GCN
- Information setting out which of these areas will be/are impacted by the operations on site and how

We would suggest that much of this information could also be presented on a suitable plan of the site.

Section 6.0 Mitigation proposed

Stage 1

- We note the intention to undertake surveys of the site in order to inform whether the stage 2 or stage 3 mitigation approach will be taken forward. This is to include surveys of the 2 waterbodies on site in order to establish likely presence/absence and a population class assessment, currently proposed between February and September. We advise that such surveys are carried out following published guidelines with surveys of the waterbodies carried out between mid-March and mid-June (with at least 2 visits for presence/absence and 3 for population class assessment carried out between mid-Apr and mid-May).

Stage 2

- In the absence of sufficient information regarding likely impacts (as set out in the point above) or of results of surveys to give a better indication of the likely risk of GCN being present within suitable habitats on site, we are unable to comment on the potential suitability in principle of the 'Stage 2' approach.
- Notwithstanding this, should the stage 2 strategy be appropriate, further information should be included clearly identifying the areas on site to which this will apply and setting out in detail the methodology that will be followed. The suitability and effectiveness of hand searching would be influenced by the nature and extent of these areas.

Stage 3

- We note that this method will be employed 'if GCN are observed to be using the site extensively'. However it is unclear what would be deemed to be 'extensive' use. We advise that on completion of surveys NRW is informed of the results and the mitigation approach (stage 2 or 3) that will be implemented.
- In the absence of the appendices we are unable to comment on the detail of the fence, trap and clear strategy including the location of the exclusion fence.

However we note and welcome that both waterbodies and a large area of grassland/meadow on site will lie outside of the fence.

- Depending on the extent and value of terrestrial habitat to be lost to GCN, please note that you may need to consider the creation of replacement terrestrial habitat features as part of this mitigation strategy, for example by enhancement of areas of the site outside of the exclusion fence.

Additional comments

- We advise that no habitats suitable for use by GCN should be impacted by operations until surveys have been completed and the appropriate mitigation approach is established and implemented. This should be reflected in the submitted strategy.

Following our comments on the draft mitigation strategy, the applicant submitted a revised strategy on 20 October 2016. We assessed the strategy and concluded that our comments to the draft strategy (as detailed above) had not been addressed in the resubmission.

Whilst we have no objection to the general principles set out in the strategy, our concerns largely relate to the clarity and to detailed aspects of the strategy that would be material to ensuring that any adverse impacts to GCN as a result of operations on site are avoided.

The current submitted mitigation strategy contains drawings that were not included in the draft upon which we previously commented. Therefore in addition to our previous comments we consider that the following points have not been sufficiently addressed in the mitigation strategy:

<u>Exclusion fence</u>

The drawing within Appendix D – Location of Proposed Great Crested Newt Exclusion Fencing indicates that fencing will only be installed along the eastern and a proportion of the northern boundary of the site. We would advocate that the newt exclusion fencing encloses the areas of the site that are impacted by the operations and that the locations of the proposed exclusion channels within the access roads are illustrated on the GCN exclusion fence location plan in appendix D.

<u>Mitigation Proposed: Stage 2</u>

We are unable to comment on the suitability of this approach on the basis of the information provided (please see our previous comments in relation to Sections 2.2 Site Description and Habitats & 5.0 Impact assessment above). Whilst we note that the majority of regularly used soil heaps are in buildings it is not clear what potential risk is posed to GCN by works to remaining heaps or other areas of the site that may provide suitable GCN habitat. In addition, if new features that might be suitable for use by GCN (such as new soil heaps) are likely to be created as part of the ongoing

operations on site, we would also expect that consideration is given to measures that ensure these will not be accessible to GCN.

Taking the above points into consideration, we do not consider the measures in the submitted mitigation strategy as suitable to provide protection to GCN from the proposed activities.

6 Other relevant issues

The Environmental Permitting (England and Wales) Regulations 2016 (the 'Regulations') and section 5 of the Government's core permitting guidance ('core guidance') define the meaning of an 'operator'.

'Operator' is defined in regulation 7 as the person who has control over the operation of a regulated facility.

The central issue in deciding whether someone is the operator of a regulated facility is whether they are able to exercise control over its operation. The Core Guidance states that an operator *"must demonstrably have the authority and ability to ensure that the Environmental Permit is complied with".*

We can assess whether an operator (or proposed operator) has the authority and ability by considering the following and other factors:

Does the operator/proposed operator have the authority and ability to:

- *manage site operations through having day-to-day control of plant operations, including the manner and rate of operation*
- *ensure that permit conditions are effectively complied with*
- *decide who holds key staff positions and have incompetent staff removed*
- *make investment and/or other financial decisions affecting performance of the facility*
- *ensure that regulated activities are suitably controlled in an emergency*.

We must not grant a permit if we consider that the applicant will not be the operator, that is, the person who will have control over the operation of the regulated facility; or if we consider they will not operate it in accordance with the permit.

The applicants' EMS states that improvements to the infrastructure and drainage of the site will be made to the site infrastructure "pending agreement on the lease with the MoD".

As a lease agreement is not currently in place between the land owner and the applicant, we do not have confidence that the applicant will be able to meet the definition of the 'operator' if they do not have agreement to operate on the site.

7 Environmental issues: likelihood of pollution

7.1 Risk to groundwater

Bespoke permit applications must include an assessment of the environmental risk of the proposals including the risk under both normal and abnormal operating conditions. We need to be satisfied that the applicant's assessment of the risk is sufficiently robust. In particular, any assumptions that the applicant has made about its proposals must be clearly justified. We assess the application and the adequacy of the impact assessment including whether the control measures proposed by the operator are appropriate for mitigating the risks and their potential impact.

Position G4 (Trade effluent and other discharges inside SPZ1) from our Groundwater Protection: Principles and Practice (GP3) apply to this operation. Position G4 states:

"Inside SPZ1 we will object to any new trade effluent, storm overflow from sewer system or other significantly contaminated discharges to ground where the risk is high and cannot be adequately mitigated. If necessary, we will use a prohibition notice to stop any such existing discharge."

The site drainage that the applicant proposes to use is not considered to be impermeable and our position statement G4 of GP3 *(as included above)* applies.

As detailed in section 5 above, the 'preliminary ground and surface water risk assessment' provided has not assessed in detail the risks to groundwater. There remains a concern over the risks to groundwater within this Source Protection Zone 1, in particular from the discharges of potentially contaminated run-off into a dry ditch and leachate seeping to ground from potentially contaminated soils stored on site.
We are therefore unable to grant a permit for this activity in this location, given the inadequate infrastructure and risk to groundwater.

7.2 Risks to Great Crested Newts (GCN)

As detailed in section 5 above, the 'Newt Mitigation Strategy' provided is not considered as suitable in its measures in protecting the protected species.

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