

Havant Thicket Reservoir

Planning references re discharge of Conditions 5, 6, 9, 10, 12 & 30 in respect of phases 2 to 8

HBC – APP/20/00990

EHDC – 51680/009

Response re Condition 5 – Construction Environment Management Plan

The Construction Environment Management Plan sets out the details on environmental controls to be implemented to address risks within Appendix D - Records of Environmental Actions and Commitments (REAC). The table in Appendix A attached uses references from the REAC to highlight;

- a) Where problems have already occurred during the enabling works phase, and
- b) **Where the LPA's should require more information, or need to consider the detail further and get additional commitments from the developer before planning Condition 5 is discharged in respect of Phase 2, or subsequent phases.**

Some key concerns regarding the CEMP and it's implementation include;

- The CEMP is too high level to demonstrate that concerns will be addressed.
- Control of silt erosion and run-off has not been adequate.
- The phasing of vegetation clearance works has not ensured periods of peak ecological activity are avoided to minimise the impacts of the works. Ecological supervision has been disappointing in some areas.
- Fencing to protect retained woodland, mature tree lines and other habitats is not adequate in all areas and this needs to be addressed urgently.
- Woodland mitigation is behind schedule despite ancient woodland already having been felled.
- An area of priority wet grassland habitat that should have been retained and enhanced has been lost and the mitigation remains unclear as to how & where sufficient 'enhanced' habitat will now be provided.
- Prompt landscape reinstatement needs to be prioritised in the work programme. For example, in the area where the temporary compound is being removed off Swanmore Road.
- Clarification is needed on the impacts/ monitoring of drainage flowing to the east and the west.
- Community access to open space has not been optimised.
- The lighting strategy needs to be more robust and properly monitored as we move into the construction phases.
- Designated exclusion zones need to be created around woodlands/ mature tree lines to protect them for any construction activity (noise & lighting) after 18.00.
- Not all supporting documents referred to in the CEMP have been provided as part of the application to discharge the conditions. For example; Drainage Management Plan, Lighting Strategy, Pollution Control Plan (CEMP page 16, doc no. HTR-FUW-ZZ-ZZ-PL-0530).
- More information/ action needed on protection of retained habitats.

In addition, in relation to the CEMP for the Phase 2 wetland there is a lack of detail on;

Provision of temporary water storage features within the retained wetland

A particular concern is the lack of information on how drainage will be controlled during the construction phases, to hold up flows from the streams to the north and direct the clean stream water around the site. The creation of the retained wetland early in the construction programme provides an opportunity to utilise areas of the northern part of the site to create balancing ponds, which if done in a way which mirrors a natural design could actually provide biodiversity benefits, allowing the early development of wetland vegetation & faunal

assemblages through natural regeneration. This opportunity was identified at the wetland outline design stage and was to specifically to be considered as part of the detailed design.

While the Contractor has advised HTR Env Sub Group stakeholders that the wetland retaining structure itself cannot be used to create a balancing pond, due to concerns about breaching during the construction period, this does not prohibit a number of smaller balancing ponds being created locally within each of the three existing valleys features. This could be done in a way that does not require the removal of existing vegetation and creates features similar to that of the former Upper Lake, with naturally flooded edges where riparian and aquatic vegetation can establish. Ultimately these ponds would be drowned below the retained wetland, but the vegetation & animal assemblages which become established would serve as a seed source for the wider retained wetland, enabling it to establish and provide biodiversity benefits more quickly.

The Contractor recently confirmed to stakeholders that they are considering creating temporary drainage ponds in the northern area, but suggested these would be very much engineered features with man-made lining likely to be used. If so, this would be a wasted opportunity to deliver some early biodiversity net gain and alternative options need to be explored further.

The LPA's should require the Contractor to investigate temporary drainage storage solutions that provide more natural water storage opportunities that could enhance biodiversity and speed up development of riparian and aquatic plants and faunal assemblages in the retained wetland.

Water Quality Management Plan

The late submission of the Water Quality Management Plan meant there was very little time available to review the content, given other commitments. I have added some feedback in Appendix.

This includes action the LPA/EA should pursue to ensure that risks are addressed.

The LPA's should not discharge Condition 5 until additional information has been provided and all of these risks have been addressed, with the Water Quality Management Plan and use of flocculant approved by the EA.

I hope that the LPA's will seek further information and assurances from the developer before Condition 5 is discharged for Phases 2 to 8.

[Redacted text]

Appendix A

Feedback on concerns/ where LPA action needed CEMP Rev 3 (Appendix D) – REAC

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
Control of silt erosion & run-off B3 Avoid site runoff of water or mud. B6 Only remove the cover in small areas during work and not all at once. <i>(This is not what the contractor has done, the majority of the site has been cleared of vegetation)</i> GC6 To reduce soil erosion and compaction during construction works. Principal Contractor to prepare a CEMP to include (but not limited to) the following mitigation measures: Minimising the area and duration of soil exposure and timely reinstatement of vegetation or hardstanding to prevent soil erosion and reduce temporary effects on soil compaction. <i>(This is not what the contractor has done)</i> W1 To protect watercourses and groundwater from construction related pollution risk (including silt) W3 A water quality monitoring strategy will be included in the CEMP, discussed and agreed with the Environment Agency. This will make provision for parameters monitored, sample locations frequency and duration of monitoring. The strategy should make provision for continuous flow and water quality monitoring in downstream watercourses as well as visual daily monitoring. <i>Note: See also comments on B18, W4&W5</i>	Daily Site Audits by a rep from the Principal Contractor Mitigation measures to be included within the CEMP and implemented during the construction works. No reportable incidents of construction related watercourse pollution above thresholds set within the water quality monitoring strategy.	The contractor has <u>not</u> prevented erosion and runoff of silt from the site. Water Quality Management Plan referred to but <u>not</u> initially included in the supporting documents (ref: HTR-FUW-P2-RE-RP-EN-0014). Provided late giving little time to review. There is a significant problem with silt run off from the site, with multiple complaints made to P.Water & the EA of sediment turning downstream water courses brown, including a brown plume discharging into Langstone Harbour SPA/SAC/Ramsar over prolonged periods. The majority of vegetation has been removed from the site well in advance of works commencing, adding to the problems of silt erosion & runoff. Silt run off is creating water quality issues downstream in terms of turbidity and silt settling on the stream bed and on vegetation. In dry summer months the large areas where vegetation has been removed is also likely to create dust issues for recreational users of adjacent paths and ecological receptors, including ancient woodland. <i>Across the site the LPA need to ensure that the contractor retains as much of the remaining vegetation as possible, for as long as possible, to minimise runoff, erosion and dust generation. This is especially important in the retained wetland area where keeping the wet grassland and stream vegetation will maximise faster regeneration and biodiversity development opportunities.</i>
B3 Ecological Clerk of Works (ECoW) to be appointed, to be full time on site during site preparation and clearance and during any works in sensitive areas, and to undertake regular monitoring visits throughout construction programme.	ECoW to be appointed by contractor will be suitably qualified and experienced ecologist. Quarterly ECoW progress reports	Concern previously expressed to LPA that ECoW should be appointed & managed by P.Water <u>not</u> the contractor (to avoid a poacher/ gamekeeper situation). Concern remains that ecological controls are <u>not</u> strict enough with habitat being removed without adequate control, sometimes at the wrong time of year. Examples include skylark habitat removal in summer, removal of habitat around Upper Lake for amphibians long before translocation took place, & buffer vegetation removal around woodland/ mature tree line in the SW. <i>Can the LPA's require that ECoW role is placed under the management of P.Water and not the Contractor going forward before agreeing to the discharge of Planning Con 38?</i>

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
Fencing to protect retained woodland & mature trees to be provided B6 Install protective fencing (high visibility or HERAS) at the edge of the working area, including protecting all retained woodland, scrub and grassland areas and a 15 m buffer zone around all ancient woodlands where practicable, and with expert arboricultural advice where work is required within 15m, and maintain throughout construction. B12 Protection of retained trees following standard practice (i.e. BS 5837:2012). A construction exclusion zone will be established using steel mesh panel fencing, or similar, around retained trees where works are not limited by the existing roads or other associated hard infrastructure that could be protecting underlying tree roots.	Integrity of adjacent areas to be monitored on weekly basis by ECoW. Updates to be included in quarterly ECoW progress report to LPA.	The Contractor has <u>not</u> delivered appropriate protection of a 15m buffer zone around woodland & mature tree lines in all areas. -The Heras mesh fence placed along S/SW boundary fence to protect SCP woodland/ trees is <u>not</u> inset 15m. Only marker tape on metal poles defines the edge of the buffer & root protection zone, but the contractors control system has already failed to protect the 15m buffer zone, as in 2023 the contractor used machinery to removed c.100m of vegetation along the SW boundary to the woodland. -Stakeholders have also been pressing to get NE retained grassland Heras fenced off to protect the area from vehicle access and damage during construction. The LPA's should require a Heras fence to be set back 15m from all tree edges, including in the S/SW during construction as it is practical to do that. Plus require the NE grassland (where the contractor has confirmed that access is not needed during the main construction phase) to be fenced off.
Woodland mitigation behind schedule B8 Habitat enhancement areas in woodlands within the reservoir site red line boundary to be undertaken early in construction programme, prior to clearance of ancient woodland, and then managed under long term management plan.	Agreement of detailed Biodiversity Mitigation and Compensation Strategy and EcMP by LPA. Initial: Portsmouth Water Date: July 2022	Woodland mitigations have <u>not</u> been delivered <u>before</u> ancient woodland removed. Mitigation Actions in Havant Thicket woodland are well behind programme. This delay has not been due to the wet weather alone. Round Wood is a retained relic of ancient woodland, but no action has been taken to deer fence around the remaining trees to fully protect them, or commence woodland enhancement measures to maximise the biodiversity potential of this ancient woodland fragment as a priority, despite repeated requests for action at HTR Env. Sub Group. The LPA's should require prompt action to deer fence and implement woodland management in the remaining area of Round Wood & ensure there is a programme to catch up on mitigation work in Havant Thicket.
Ground flora relocation? B10 During detailed design, identify suitable areas of ancient woodland indicator ground flora plants for localised transplanting into retained areas of woodland. During site clearance, ECoW or other suitably qualified and experienced ecologist will undertake transplanting.	Agreement of detailed Bio Mitigation and Compensation Strategy by LPA. Quarterly ECoW progress reports to be provided to LPA during construction.	Grey shading of boxes in table suggests that action is complete which is surprising. I am not aware of any action to translocate ancient woodland ground flora <u>before</u> woodland removed, except for a very small number of woodland plants rescued by volunteers in 2022. The LPA should query if this commitment to relocate ancient woodland flora was honoured.

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
Enhance retained wet grassland? B13 Create compensatory purple moor-grass and rush pasture habitat in glades in Havant Thicket, at least 1:1 for loss of this habitat. Enhance retained wet grassland habitat.	Agreement of detailed Biodiversity Mitigation and Compensation Strategy by LPA. Quarterly ECoW progress reports to be provided to LPA during construction.	Unfortunately the wet grassland habitat which was mapped as priority habitat in the SW of the reservoir site has not been retained. It was removed by the contractor in 2023 to make way for additional surface water drainage/ settlement pond. As a result it will not be possible to enhance the retained wet grassland habitat to encourage it to spread over a wider area. The contractor has told the HTR Env Sub Group that the wet grassland priority habitat soil has been kept separate and placed in a labelled low stockpile to try and protect the seed stock in the soil, so that it can be reused in the reinstatement. The LPA should seek further information on how mitigation will be delivered to ensure that a larger area of wet grassland with the potential to develop into priority habitat will be delivered in the SW of the site. Noting that the area available for this in the SW has also been reduced by the proposal to move the embankment toe further south in this area. Conditions should not be discharged until this information is available.
Control of silt risk & addressing downstream impacts B18 Silt control measures to be applied to control siltation risks associated with de-watering activities and construction related discharges. There will be a requirement to manage potential of silt propagation within watercourse channels associated with in-channel working. Required as part of Flood Risk Activity Permits.	No reportable incidents of construction related watercourse pollution above thresholds set within the water quality monitoring strategy. Quarterly ECoW progress reports to be provided to LPA during construction.	Vegetation has been removed from all watercourses, at the site except one land drain. Silt control is now a major problem, with multiple complaints over many months. Silt carried downstream is settling in water courses and a large cloud of silt has been repeatedly discharging into Langstone Harbour. Contractor has advised that more action is needed to control silt leaving the site, plus monitoring of downstream water courses is underway to assess the impact. LPA /EA need to ensure that monitoring is robust and assesses the impact of long-term silt discharges which took place throughout winter 2023/24, including the impact on downstream ecology. A plan needs to be agreed with the LPA/EA for additional mitigation of risk and for addressing impacts that have already occurred downstream.
Lighting strategy to protect bats B23 Protection of bats from indirect harm; Mitigation will be provided for lighting during construction and operation. Any temporary lighting required during	Quarterly ECoW progress reports to be provided to LPA during construction.	During the initial phases of construction there have been complaints about excessive lighting of compound areas. Appropriate good practice methods were only applied following complaints from the public. The lighting strategy was not submitted as a supporting document to the Phase 2

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
construction will be designed to minimise light spill. Note: Please can the LPA's also refer to comments made on the Construction Lighting Strategy submitted to the LPA's on 11/5/24 in response to the application for Temporary Workers Accommodation, as those comments are also relevant to this application relating to the Phase 2 to 8 works.		application (nor phases 3 to 8 discharge). The LPA's need to ensure that there is a lighting strategy that complies with good practice and uses modern mitigation techniques to minimise impacts. The strategy must be applied to <u>all</u> lighting at the site, including the proposed satellite compounds within the works area. If staff are remaining in the compound to work outside of the permitted site working hours then office lighting etc must be controlled using window shutters/ blinds. This needs to be addressed in the lighting strategy for Phases 2 to 8 and monitoring undertaken to ensure any stipulated requirements are met. Exclusion zones (50m) need to be established close to woodland & mature tree lines, where no work should take place after 18.00. This would include exclusion zones where the retaining structures for the wetland (Phase 2) abut the Havant Thicket woodland.
B28 Protection of nesting birds Precautionary pre-clearance survey will be undertaken at areas of suitable habitat if clearance is required in the nesting season (typically March to August). Vegetation clearance in these areas will follow Precautionary Method of Working.	Quarterly ECoW progress reports to be provided to LPA during construction.	Good practice is to avoid clearing vegetation during the breeding season. Concern has been expressed by multiple stakeholders that <u>not</u> enough effort was made by the Contractor to avoid impacts on nesting birds by limiting vegetation clearance to months outside of the breeding season. Instead the contractor relied on surveying for ground nesting birds before large areas of vegetation were cleared, which is not a full-proof method. LPA needs to ensure that planned phasing of works does allow for the timing of work to clear vegetation to take place <u>outside</u> the summer breeding season to minimise the impacts. Vegetation clearance in summer under supervision should be a rare <u>not</u> routine event.
Protection of reptiles & amphibians B30 Retained vegetation will be protected for use as receptor sites. Clearance of suitable habitat will follow a Precautionary Method of Works. This is likely to include a combination of translocation and displacement of animals into enhanced adjacent retained habitat. The PMW will set out the season and method of clearance.	Quarterly ECoW progress reports to be provided to LPA during construction.	Concern that good practice was <u>not</u> always followed when clearing vegetation to date. For example, inadequate ecological supervision when machines stripping soil, mowing to a decreasing circle instead of in strips which allow reptiles to escape, and lack of maintenance of reptile fencing during the active season. Also a concern that suitable vegetation cleared around Upper Lake <u>before</u> amphibian translocation from the pond happened . LPA need to ensure that the Reptile Mitigation Strategy has been updated to reflect the ongoing need for reptile mitigation and ensure that it is implemented.

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
Prompt landscape reinstatement LV6 Reinstatement of landscape disturbed by the works; Where removal of sections of scrub, hedgerows and trees are unavoidable, appropriate tree and hedge species will be replanted along the line of the existing hedge or within the area of scrub. These will be managed to restore the area to its pre-construction state.	Mitigation measures to be included in the CEMP.	Mature trees and scrub were removed to make way for the temporary contractors compound off Swanmore Road, including clearing trees to enlarge the entrance. This has had an adverse impact on the SW wildlife connectivity corridor between SCP and Havant Thicket. There is <u>no</u> current plan in place for replacement planting. The LPA should require provision of a planting scheme asap to replace what has been lost (x2) to help restore connectivity along the site west boundary, <u>not</u> wait for the completion of the embankment work. This is to ensure the trees have time to establish while construction is ongoing. When the temporary compound fencing is removed it should be set back a short distance from the boundary to allow this replacement connectivity planting to take place in winter 2024/25.
Aftercare for new landscaping LV9 A five-year aftercare period for all soft landscape is to be included within the construction contract to ensure successful establishment. Maintenance within the period to be carried out in accordance with an agreed management plan, maintenance specification and maintenance schedule, all to be developed and agreed in the detailed design stages.	Management Plan, maintenance specification and schedules to be agreed and put in place preconstruction. Regular inspection and site monitoring to be undertaken throughout the construction period.	In the first 3 to 4 years since planting of the trees in the Phase 1 & 2 areas was complete aftercare has been minimal and thousands of tree saplings have died as a result. An aftercare contract was <u>not</u> put in place until winter 2023/24, when once again large numbers of dead saplings and 3m trees had to be replaced. Given that the aftercare contract was only put in place in 2023 the LPA should ensure that the aftercare period continues until at least winter 2028/29. Noting that the original pre-planning written agreement between P.Water and the LPA was for a 10 year aftercare period in the Phase 1 & 2 planting areas.
Stream/ water flow management W2 A Drainage Management Plan <u>will</u> be developed, which will include, as a minimum the following detail on drainage design and management. <i>Note: The listed things are all relevant but are of a generic nature, rather than being site specific.</i> W3 A water quality monitoring strategy will be included in the CEMP, discussed and agreed with the Environment Agency. This will make provision for parameters monitored, sample locations frequency and duration of monitoring. <i>Note: Not initially provided as a supporting document so little time to review.</i>	Pollution prevention measures will be detailed in the CEMP. No reportable incidents or fish kills. No reportable incidents of construction related watercourse pollution	The Contractor did <u>not</u> initially put a system in place to divert clean flows from the head water streams around the construction site. This has exacerbated the silt control problem. Eventually a temporary solution was put in place for periods of higher flow. The permanent solution is still unclear. W2 to W4 indicated to be addressed in the Water Quality Management Report (<i>but this is not initially provided in supporting documents</i>) Row W2 indicated a Drainage Management Plan will be developed, but this has <u>not</u> been provided as a supporting document? The LPA/EA need to ensure that there is a robust mechanism agreed and installed for diverting the clean water from the northern head water streams around the development

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
W4 Construction flow management measures around the dewatering of the area within the footprint of the reservoir to ensure the waters from the headwaters are captured and diverted around the site and fed into the top of the Riders Lane Stream downstream of the footprint with proper		site to protect water quality and ecology. The Drainage Management Plan and Water Quality Management Plan should be an intrinsic part of the CEMP. The planning condition relating to the CEMP for further phases of development should not be discharged until the EA have reviewed and agreed these key plans. This is especially true for the retained wetland which has 3 head water streams flowing through it and a land drain ditch discharging significant volumes of water in the NE. Given the ongoing problems the LPA's should require downstream monitoring of water quality and silt build up, with a requirement to submit a mitigation/ compensation strategy for the damage caused (in. to ecology downstream)
No water discharges to west? W5 There will be no water discharges into the Park Lane Stream catchment. All water will be channelled to the head of Riders Lane Stream where flow and quality will be controlled.	Pollution prevention measures will be detailed in the CEMP. No reportable incidents or fish kills.	Drainage from the ditches along the west side of the site compound area does drain to the west (Park Lane Catchment) LPA/EA should review the monitoring strategy; - Are ditches that drain west being monitored? - Daily visual checks?
Drainage to the Lavant Stream W6 Habitats in new toe drains and ditch diversions (for watercourses draining to the River Lavant) will be improved to increase their ecological potential to provide habitats to a wider range of species than they are expected to contain at the moment.	Detail will be provided in the Outline Biodiversity Mitigation and Compensation Strategy.	This is positive, but the Contractor previously indicated that the toe drainage for the embankment east of The Avenue will actually be directed to the <u>west</u> (i.e. not to the Lavant Stream) Some of the drainage from the east side of the reservoir site currently drains SE to the Lavant catchment. The LPA/EA need to consider if the flow to the Lavant catchment will be reduced as a result of the proposed drainage works, and if so what mitigation is necessary?
Community access to open space not optimised PHH2 To minimise the adverse effect on active travel and on access to open space, access to opportunities for recreation & leisure and access to work & training.	Measures to be included within CTMP to be agreed by LPA	The Contractor has <u>not</u> done all that they can to retain access to open space for recreation, leisure and the well being of the local community. Well used paths have understandably been shut off but there has been a lack of effort to offer alternatives or enhance the alternatives despite the long period access will be restricted during construction. Action should be taken to; - Provide a path around the west of the site from the stile in the NE corner of Swanmore Road to Memory Park when the temporary compound is removed. This would help provide a short circular walk for local residents

Actions/commitments made in the REAC (including row reference)	Specified achievement criteria and reporting req.	Comments where Contractor <u>not</u> delivering and action needed by LPA
		in mitigation for what has been lost. - Improve access in the SW between Memory Park and Staunton Country Park to ensure the community and visitors to the wider site still have a safe circular route around the reservoir site. - Ensure existing routes are safe for increased multi user activity, including along the eastern path which has blind bends. Action needed to introduce appropriate measures to slow down bikes & horses. Community Stakeholders raised many concerns about the Draft Recreation Strategy. The revised strategy is <u>not</u> yet available. Given the long construction timescales involved the LPA should be encouraging the Contractor/ P.Water to provide & sign post alternative access paths around the site, including making existing routes safer for a range of users.

Appendix B

Water Quality Monitoring Plan – feedback/ actions

B1. Continuous monitoring of WQ in the Durrants Stream

Page 12 (25) states; The proposed water quality monitoring locations will provide representative water quality samples from locations upstream and downstream of the Main Works. As the majority of the Main Works occurs within the Riders Lane Stream catchment, rather than the Durrants Stream catchment on the eastern edge of the site, **it is not considered to be proportionate to undertake continuous monitoring of water quality in the Durrants Stream.**

I would disagree with this statement. While it may not be proportionate to undertake continuous monitoring when no work is taking place on the eastern side of the site, it **would be appropriate when construction of the eastern embankment is taking place.** The eastern embankment cuts right across the feeder channel into the Durrants Stream and as a result the risks are significant to the stream when work is undertaken in the east.

The LPA's/EA should be requiring continuous monitoring of the Durrants Stream, when the eastern embankment and operational access road are being constructed within that drainage catchment.

B2. Continuous water quality monitoring locations

Figure 2-1 Continuous water quality monitoring locations (sondes) is missing. Text indicated “to be updated based on final design and Permit requirements”. Why is the draft plan not included for consideration/ comment?

The plan should be added to the updated report. It is not possible to see if the proposed monitoring points address all of the risks. For example, are monitoring points shown on the

B3. Action on non-conforming sediment curtains

Page 14 (31) stated; Condition of sediment management measures implemented on the Site to ensure that they are operating effectively. Any nonconforming sediment curtains found by inspection will be replaced. No indication is given as to the response time expected on replacement of sediment curtains?

It should be made clear in the Plan that spare materials should always be stocked on site and defective curtains should be replaced within 24 hours.

B4. Monitoring for Total Petroleum Hydrocarbons

On the page 16 table there is a row for monitoring TPH no caution or action limits, even though hydrocarbon spillage is a risk identified as relevant to this site earlier in the report. There is also no measurement method or frequency stipulated?

Further information should be provided on how TPH will be monitored and at what frequency?

B5. No reference to preventative measures

There did not appear to be any reference to preventative measures to prevent erosion and run off in the first instance, such as retaining as much vegetation on site as possible, so that the roots hold the soil in place.

Prevention is always better and likely to be more effective than control measures.

Preventative actions proposed should be recorded in the report, with every attempt to be made to retain vegetation and manage it by mowing, rather than removing vegetation well in advance of planned works in any area, as has happened to date. Preventing and minimising erosion and silt run-off should be the priority rather than resorting direct to use of treatment chemicals to address the problem.

B6. Monitoring for the Durrants Stream and Park Lane Stream

Page 22(47) refers to; “no discharge will be made into Durrants Stream or Park Lane Stream and their tributaries in accordance with REAC commitment W5.” Given the proximity of significant works and construction/ storage operations (including fuel storage) to these streams it is important that there are monitoring protocols for the Durrants Stream and Park Lane Stream included.

Ensure that there are monitoring points with regular daily inspections of the Durrants Stream and Park Lane Streams.

B7. Removal of vegetated buffers along streams

Page 23 (48) referred to; The establishment of vegetation buffer strips adjacent to all channels and the site boundary to reduce the amount of surface water runoff entering the surface water drainage network. The Contractor has removed the existing vegetation from ditches, land drains and water courses. To help reduce runoff it would have been better to retain most of the existing grass and sedges along the edges of existing water courses to help reduce erosion and runoff.

Remaining low level plants in water courses, drains and ditches should be retained for as long as possible so that the established root structure helps to hold the soil/ silt in place.

B8. Removing silt in a solid form

Page 23 (48) refers to; The attenuation basins must be shaped and maintained to maximise retention of sediment. This includes removal of silt build up when required or at 6-month intervals. If silt attenuation basins are to be excavated to remove silt this must be programmed to take place during the dry summer period when ephemeral streams are not flowing to ensure silt is removed in its solid form and does not run the risk of mobilising the settled out silt and posing a risk to the streams. On completion of silt removal the base of the attenuation basin would have to be compacted, or other action taken, to minimise the risk of mobilisation of silt during the first rains after desilting.

Ensure clear silt is removed from attenuation basins in the dry summer period when the risk of mobilisation off-site via the streams is lowest. A method statement should be included as an appendix to detail method and control measures to minimise the risk from desilting operations.

B9. Providing superseded solids and turbidity controls

Page 23 (48) refers to; The water discharged into Riders Lane Stream will contain no more than 40mg/l of suspended solids, as specified in the environmental permit. The monitoring table on page V referred to a stop value for works being 12 NTU. Should that value be included in the main text also for clarity.

Provide suspended solid limits and turbidity NTU values to be used.

It should be clear limits apply to the Durrants Stream and Park Lane Stream too.

B10. Mobile re-fueling not to be permitted?

Page 23 (49) refers to; Will only be refuelled within designed areas, which must be comprised of hardstanding with sealed drainage. However, other reports reviewed have referred to having a towed fuel bowser. I

Clarification is needed as to whether re-fueling anywhere on site would be permitted using a towed fuel bowser. If this method of re-fueling is to be allowed strict control measures would need to be applied, including drip mats and spill kits to be available on the bowser.

B11. Preventing drips from large plant

Page 24 (49) states; Small plant will be stored in a drip tray or plant 'nappy' to contain any drips or Spills. The REAC W1 refers to; All machines shall use oil trays when parked on site; all

How will drips/ spills from large plant be controlled/ monitored?

B12. Use of flocculant gel 494 and 360 blend and pipe reactor methodology

Appendix A refers to use of a mixture of Gel Flocculant in a ratio of 3 blocks of 494 Gel Flocculant and 2 blocks of 360 Gel Flocculant, deployed via a pipe reactor.

- It is not clear if this method of silt control has been approved by the EA?
- If by-products could be created that require monitoring downstream? *Note: Pdf page 37 states; Should there be specific environmental sensitivities, testing for acrylamide and aluminum concentrations in effluent can be undertaken as part of a management system to ensure thresholds are not breached*
- Will all ditches be lined with BioNet or a similar material, as recommended by the specialist contractor?
- How where is the pipe reactor emptied / cleaned? (how often likely to be necessary?)

The LPA's should not discharge Condition 5 until additional information has been provided and all of these risks have been addressed, with the Water Quality Management Plan and use of flocculant approved by the EA.