

Adran yr Economi a'r Seilwaith
Department for Economy and Infrastructure



Llywodraeth Cymru
Welsh Government

This document is an update to the 'Proof of Evidence – Chief Witness' document WG 1.1.1. It contains an update following the addition of the bridge protection measures in the DRAFT AMENDMENT (NO.2) SCHEME ORDER and a general update on the works to address the allegation of serious detriment upon Newport Docks by Associated British Ports (ABP).

Scheme Evidence Update

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Welsh Government, Land Contamination

Document Reference: WG 1.11.4

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1. AUTHOR

- 1.1 I am Andy Clifton. I am an Operational Director of RPS in the Planning and Development Division of RPS Group plc. My professional qualifications are set out in my main Proof of Evidence (WG 1.11.1) and are not repeated here.
- 1.2 I have been the lead for contamination on the M4CaN scheme since the Costain Vinci Joint Venture (CVJV) was awarded the Key Stage 3 and 4 contract by Welsh Government in 2015, having advised the CVJV team during the tendering process.
- 1.3 The evidence which I have prepared and provide in this Scheme Evidence Update has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions.

2. SCOPE AND PURPOSE OF THIS SCHEME EVIDENCE UPDATE

- 2.1 This Scheme Evidence Update provides updated evidence for the Welsh Government's Scheme as modified by the August 2017 draft Orders Supplement to include proposals for bridge protection measures in the vicinity of the Junction Cut and the works required to address any serious detriment within Newport Docks.
- 2.2 This evidence provides additional information in respect of the August 2017 Environmental Statement Supplement (Document 2.8.6) concerning land contamination, hazardous substances consents and environmental permitting aspects of the Scheme. It does not supersede my previous evidence.
- 2.3 Aspects of my evidence interface with or refer to the evidence of other witnesses including:
- a) Mr Matthew Jones (Chief Witness)
 - b) Dr Peter Ireland (Environment)
- 2.4 For simplicity of reference, throughout my evidence I will refer to the following abbreviations:
- a) NCC Newport City Council
 - b) NRW Natural Resources Wales
 - c) WG Welsh Government

2.5 My evidence is presented in the following structure, with a detailed contents provided at the start of the document.

1. Author
2. Scope and Purpose of this Scheme Evidence Update
3. Scheme Evidence Update – Land Contamination
4. Scheme Evidence Update – Hazardous Installations
5. Response to objections – NRW letter dated 26th September 2017
6. Conclusions
 - Appendix 1 - Correspondence with HSE regarding HSCs
 - Appendix 1A – HSE Email 19th January 2016
 - Appendix 1B – HSE Consultation Response Letter to HSC Application 15/1109 dated 24th November 2015
 - Appendix 1C – HSE email 19th September 2017
 - Appendix 2 - Request for Pre-application Advice
 - Appendix 3 - Indicative Tenant Occupancies
 - Appendix 4 - HSC Consultation Zones
 - Appendix 4A – Origin and Mole Valley Combined HSC Consultation Zones
 - Appendix 4B – Mole Valley Equivalent HSC Consultation Zones
 - Appendix 4C – Indicative HSC Consultation Zones
 - Appendix 5 – NCC initial response to HSC pre-application 9th October 2017
 - Appendix 6 – Sims Group UK Limited Environmental Permit Interface Drawing

3. SCHEME EVIDENCE UPDATE – LAND CONTAMINATION

3.1. Works within Newport Docks

- 3.1.1. The Welsh Government published a supplement to the draft Orders in April 2017 to include bridge protection measures as part of the proposed Scheme. The supplement to the draft Orders was accompanied by a supplement to the Environmental Statement, the April 2017 ESS (Document 2.6.1).
- 3.1.2. Further works are proposed to address ABP's allegations of serious detriment to Newport Docks. These include additional quayside works within South Dock to offset the effects of the bridge over Junction Cut and its protection measures and the relocation of ABP's assets and those tenants within Newport Docks that would be affected by the published Scheme. Those further works are described and assessed in the August 2017 ESS (Document 2.8.6).
- 3.1.3. The key elements of the works covered by the August 2017 ESS that are proposed are as follows:
- a) The creation of buildouts along with a narrowed entrance to Junction Cut to reduce the risks to the bridge from vessel impacts.
 - b) The phased creation of approximately 303m of new quay on the north side of South Dock.
 - c) Refurbishment of 250m of quay on the south side of South Dock (at the eastern end of the Coal Terminal).
 - d) Provision of a moveable bridge to facilitate mobile harbour cranes, other port equipment and HGV's to cross the extended junction cut from west to east (and vice versa) of South Dock.

- e) Preparation of 3 parcels of land to facilitate the relocation of ABP, tenants and occupiers of the port that are affected temporarily and permanently by the Scheme, including site preparation, new buildings, hardstandings and infrastructure.

3.1.4. Further details of the proposals are provided in the Scheme Evidence Update of Mr Matthew Jones (WG 1.1.8) including a Relocation Concept Masterplan.

3.2. April 2017 Environmental Statement Supplement

- 3.2.1. The April 2017 ESS was concerned solely with the bridge protection measures that were the subject of the April 2017 draft supplementary (No. 3) Compulsory Purchase Order.
- 3.2.2. Sheets 5, 6 and 16 of Figure 2.4 of the March 2016 ES are the General Arrangement drawings that show the proposed scheme across Newport Docks. Those sheets were updated to include:
 - a) 150m of new quay at the western end of the north side of South Dock (Sheet 5).
 - b) Build outs either end of the Junction Cut in the North Dock and South Dock to provide bridge protection measures for the Usk Crossing. The width of the Junction Cut was unchanged (Sheet 6 and 16).
 - c) A new retaining wall on the east side of the Docks Way Link Road to protect the building operated by LDH (Sheet 16).
- 3.2.3. A more detailed general arrangement drawing of the proposed bridge protection measures together with four cross sections were provided as Appendix FS3.1. The Environmental Masterplans (EMPs) (Figure 2.6, March 2016 ES) were also updated accordingly.

3.2.4. The assessment of the effects on geology and soils assumed that no dredging or the associated disposal of potentially contaminated sediments would be required. As such, the conclusion was that “*the construction and operation of the proposed bridge protection measures would not significantly change the conclusions of the March 2016 ES and ES Supplements with respect to soils, geology and land contamination*” (paragraph 2.2.18).

3.3. August 2017 Environmental Statement Supplement

3.3.1. The August 2017 ES Supplement (also referred to as ESS5) includes an assessment of the key features described at points a), b) and c) in section 3.2.2 of this document.

Establishment of Baseline Conditions

3.3.2. An assessment of the baseline conditions at the land to be redeveloped to accommodate the proposed Port Relocation Plan is provided in the August 2017 ESS section 2.8 and this is based upon a more detailed assessment set out in a Desk Top Study and Preliminary Risk Assessment Report (DTS) (Appendix 2.7 of ESS5). The assessment has been undertaken drawing upon modern guidance including the Model Procedures for the Management of Land Contamination CLR11¹ and the Development of Land Affected by Contamination: A Guide for Developers².

¹ Environment Agency (2004), The Model Procedures for the Management of Land Contamination Contaminated Land Report 11. CLR11. September 2004.

² Welsh Local Government Association (WLGA) and Environment Agency (2012) Development of Land Affected by Contamination: A Guide for Developers. 2014.

- 3.3.3. The DTS sets out the anticipated ground conditions based on available information including historical maps and photos, environmental database searches as well as previous ground investigation reports and data. In general terms, similar ground conditions to that established within the September 2016 ES Supplement within Appendix R11.1 (Annex D - CL-14) are expected to be present.
- 3.3.4. The DTS sets out that Made Ground is expected to be present overlying the soft clays and silts of the Tidal Flat Deposits (TFD) which in turn overlie the Glaciofluvial Deposits (GFD), below which the Mercia Mudstone Group lies.
- 3.3.5. The DTS has also assessed the potential for land contamination to be present at the redevelopment areas. This has identified a number of potentially contaminating historical uses of the land which is not unexpected given the long history of Newport Docks. This has included land raising activities, historical landfill, coal storage, material stockpiling, timber yards, railway sidings, petrol storage distribution, timber yards and saw mills and shipbuilding and repairs.
- 3.3.6. Previous ground investigations undertaken on and around the proposed land parcels to be redeveloped have indicated elevated concentrations of heavy metals and hydrocarbons in soils although concentrations were not noted to exceed generic human health risk assessment criteria based on a commercial end use. Localised instances of asbestos contaminated soils were also identified in some areas. These land contamination conditions appear similar to elsewhere at the Docks identified in previous ground investigations.

- 3.3.7. The proposed quayside and bridge protection works will require dredging to be undertaken. In order to determine whether dredge materials can be disposed of at sea or on land, sampling and analysis will be required which will need to include an analysis for contamination. This process is undertaken by the Centre for Environment, Fisheries & Aquaculture Science (CEFAS) on behalf of NRW. The analysis required is in accordance with the OSPAR³ Guidelines for the Management of Dredged Material⁴ and involves consideration of the physical, chemical and biological characteristics of the material for assessment of its potential effects on the marine environment.
- 3.3.8. Should the dredgings be unsuitable for sea disposal or treatment for reuse on land either on site or off site, dredgings will need to be sent for off-site disposal at a suitably licensed waste management facility. Depending upon contamination levels and the physical composition of the dredgings a proportion may be suitable for re-use following treatment.
- 3.3.9. WG is committed to undertaking site investigation within the ABP Newport Dock to support the detailed design of the ABP port relocation plan including quayside and bridge protection works. During the site investigation, appropriate samples would be collected from the dock and analysed to determine whether the sediment to be dredged is suitable for off shore disposal.

Summary of Risks from Land Contamination and Mitigation

- 3.3.10. The DTS provides a risk assessment and sets out a conceptual site model in line with current guidance. Key risks from the potential for land contamination that were assessed included potential risks to construction workers, the general public, future site users and the water environment.

³ The Convention for the Protection of the Marine Environment of the North-East Atlantic

⁴ OSPAR Guidelines for the Management of Dredged Materials, ref 1998-20.

<https://www.dredging.org/documents/ceda/downloads/environment-ospar-dmguidelines.pdf>

- 3.3.11. For many of the potential plausible contaminant linkages, the risk levels were low. However, for some risk scenarios a higher level of risk was identified including the need to carefully manage potential asbestos contaminated soils during construction and to prevent the potential risk of landfill gas entering buildings. These risks are similar to those identified elsewhere at Newport Docks (September 2016 ES Supplement within Appendix R11.1 (Annex D - CL-14))
- 3.3.12. During operation, the presence of hardstandings and construction of a land raise to provide flood protection measures will act as a barrier between contaminants in the ground and future site users. Similarly, the presence of low permeability hardstandings and buildings with modern, dedicated drainage systems will reduce risk from rain infiltrating soils and leaching contaminants.
- 3.3.13. During construction, normal safe working practices and industry good practice that will be adopted on a typical construction site on brownfield land would be adequate to mitigate most risks. Nonetheless the DTS identified that additional mitigation measures would be necessary to support the safe redevelopment including:
- a) Further ground investigation including gas monitoring and groundwater sampling to fully characterize the ground conditions and establish risk levels based upon the specific development detail.
 - b) A remediation strategy would need to be developed should unacceptable risk be confirmed by the ground investigation. The remediation strategy would need to be agreed with NRW and NCC.

- 3.3.14. The DTS states in para 7.1.7 *“Despite the potential for land contamination ground conditions are not unexpected and based on the proposed development it is unlikely the levels of contamination that may be present would preclude development. Indeed following further investigation, risk assessment and where needed remediation, conditions at the Site would be improved with respect to risks from potential land contamination.”* In fact, NCC have given planning consent⁵ for commercial development in other areas of ABP’s Newport Docks where ground conditions are likely to be similar.
- 3.3.15. In the August 2017 ESS (paragraph 2.8.39) it states that *“The effects of the proposed relocation of businesses and port operations, added to the effects of the proposed new section of motorway on and by soils and geology, and specifically land contamination, have been re-assessed following the ABP tenant relocation assessment. The evaluation of potential indirect effects has not identified any increase in the significance of effects associated with the M4CaN Scheme. “*
- 3.3.16. In the August 2017 ESS (paragraph 3.1.43) the assessment of the effects on geology and soils including land contamination as a consequence of the proposed implementation of the Port Relocation Plan concludes *“the construction and operation of the new North Quay and the refurbishment of the existing South Quay is not considered to significantly change the conclusions of the March 2016 ES and ES Supplements with respect to soils, geology and land contamination”*.

⁵ See: Decision 14/1172 – Installation and operation of a small biomass gasification plant; Decision 16/1030 – Part retention part completion of 1No steel storage shed and biomass heater; Decision 16/0798 – Proposed extension to existing production / processing facility; Decision 17/0174 – Creation of hardstanding and associated drainage infrastructure.

4. SCHEME EVIDENCE UPDATE – HAZARDOUS INSTALLATIONS

4.1. Introduction

- 4.1.1. Hazardous installations affected by the Scheme are described in a report at Appendix SS2.2 to the December 2016 ES Supplement (Document 2.4.14). One of the installations affected by the Scheme is the operation of Origin UK Operations Limited (Origin). The impact of the Scheme on this operation is described in the main Proof of Evidence of Matthew Jones at paragraph 19.7 (WG 1.1.1). In that evidence, it was stated that:

“Origin could reasonably be relocated further south in the Docks to a location that the HSE would not ‘advise against’ in relation to the Project, allowing a new hazardous substance consent to be obtained by ABP and business operations to continue.”

- 4.1.2. As stated in the Scheme Update Evidence of Matthew Jones (WG 1.1.8) at paragraph 3.2.17, the Welsh Government has now, with the engagement of ABP, its tenants and other stakeholders, produced a plan for relocations within the port (at Appendix A of Matthew Jones’ evidence). This plan makes provision for Origin to move to a purpose-built premises to the south of South Dock.

4.2. Hazardous Substances Consents In Land Use Planning

- 4.2.1. Sites which want to hold certain quantities of hazardous substances at or above defined limits must obtain hazardous substance consent (HSC). In Wales, this is in accordance with the Planning (Hazardous Substances) (Wales) Regulations 2015. These regulations are made in accordance with the Planning (Hazardous Substances) Act 1990. They also implement the land-use aspects of Directive 2012/18/EU of the European Parliament and the Council on the control of major accident hazards involving dangerous substances.

- 4.2.2. HSCs are a planning control enabling the hazardous substances authority to decide on whether the presence of hazardous substances are appropriate in relation to the residual risk to the community.⁶ The relevant hazardous substance authority (HSA) is the council of the district, Welsh county, county borough or London borough in which land is situated. In relation to the Scheme the relevant hazardous substance authority is Newport City Council (NCC).
- 4.2.3. The Health and Safety Executive (HSE) is a statutory consultee on applications for HSCs. The HSE will consider the hazards and risks which the hazardous substance may present to people in the surrounding area, and take account of existing and potential developments. The HSE will advise the HSA on whether or not consent should be refused on the grounds of safety. The HSE's advice is aimed at mitigating the effects of a major accident on the population around a major hazard site.
- 4.2.4. In assessing the application for consent, HSE will produce a map with three risk zones, representing defined levels of risk or harm which any individual would be subject to. Should the HSA grant consent, this map defines the consultation distance within which HSE must be consulted over any relevant future planning applications.
- 4.2.5. The HSE use a simple matrix to decide whether or not they will advise the local planning authority against the proposed development within a consultation zone. The matrix assigns an 'advise against' or 'don't advise against' based on which zone the development will fall in (inner, middle or outer) and the level of sensitivity of the development.

⁶ The residual risk is the risk which remains after all reasonably practicable preventative measures have been taken to ensure compliance with the requirements of the Health and Safety at Work etc Act 1974 and its relevant statutory provisions.

- 4.2.6. The HSE Land Use Planning Methodology⁷ provides a matrix (reproduced as Table 1 below) to help assess when proposed development near to those holding a HSC will be acceptable:

Table 1 - HSE Consultation Zones Development Advice

Level of Sensitivity	Development in Inner Zone	Development in Middle Zone	Development in Outer Zone
1	DAA	DAA	DAA
2	AA	DAA	DAA
3	AA	AA	DAA
4	AA	AA	AA

DAA = Don't Advise Against Development

AA = Advise Against Development

- 4.2.7. A motorway development is listed in the HSE land use planning methodology as level 2 sensitivity. The methodology provides that any development within the inner zone with a level 2 sensitivity or above, would result in a HSE consultation advice outcome of 'advise against' development.

4.3. Hazardous Substance Consents held by ABP and operated by Origin UK Operations Limited

- 4.3.1. Origin UK Operations Limited currently operate under a HSC (96/0240) which allows for the blending, bagging and co-storage of materials such as ammonium nitrate and urea in Shed 9 and 9A at Newport Docks. This consent allows for storage of up to 4,950 tonnes of ammonium nitrate and was granted to ABP.

⁷ Planning Advice for Developments near Hazardous Installations:
<http://www.hse.gov.uk/landuseplanning/methodology.pdf>

- 4.3.2. A second HSC (15/1109) is in place which allows for 4,999 tonnes of fertiliser grade ammonium nitrate to be stored in sheds 8, 9B and 9C. This consent was obtained by ABP but the site is operated by Mole Valley Farmers Limited to receive and store bagged and bulk fertiliser materials and also to bag bulk fertilisers. This includes a small area of outside storage. The application for this HSC was made by ABP. In their consultation response, at Appendix 1B, HSE explain that “the risks from Hazardous Substances for which Consent is being sought have been assessed alongside those from granted Consent 96/0240”. As a result the consultation zones for the two HSCs were combined resulting in the zones shown on the drawing in Appendix 4A. These consultation zones are therefore assessed on the basis of the combined handling and storage of 9,949 tonnes of ammonium nitrate.
- 4.3.3. HSE has provided, by email dated 19th January 2016, an indication of what the consultation zones for the Mole Valley consent in isolation would be for a 4,999 tonne limit. These ‘equivalent’ consultation zones are shown on the drawing at Appendix 4B. This indicates that the Mole Valley operation alone would not be impacted by the Scheme and that storage could continue at this location with the Scheme in place. Mole Valley’s operations are similar to Origin’s but Mole Valley’s HSC does not allow for co-storage of urea at the site and Mole Valley do not undertaking blending operations. The Scheme does not pass through the inner zone for this HSC and this is shown in Appendix 4B.

4.3.4. The proposed new section of the Scheme does, however, pass through the inner zone of the combined Origin and Mole Valley consents. As a motorway is defined by the HSE as a development with level 2 sensitivity, the HSE would 'advise against' the Scheme if the Origin HSC (96/0240) were to remain in place. In order to allow the Scheme to be constructed, this HSC would need to be revoked by the HSA. Origin requires a HSC to operate and therefore would not be able to continue its operation in its current location were the HSC to be revoked. Origin would therefore need to be relocated to a location where a new HSC could be obtained without being affected by the Scheme.

4.3.5. On 2nd May 2017 Origin applied to NCC for a modification of its existing HSC which would remove the prohibition of open storage of ammonium nitrate (reference 17/0414). This condition was originally imposed because the site was under construction with few security measures in place. The Origin site now has a number of security measures in place including a perimeter fence, CCTV monitoring and intruder alarm and therefore Origin are seeking consent for outside storage of ammonium nitrate. This is in line with HSE guidance relating to storage of ammonium nitrate⁸. Outside storage is already taking place at the site and so the 2nd May 2017 application is therefore retrospective.

4.4. Proposed Port Relocation Plan

4.4.1. As described in para 4.1.2 of this document, WG has produced a port relocation plan which makes provision for all tenants affected by the Scheme to be relocated to other areas of the Docks.

⁸ INDG230 – Storage and Handling of Ammonium Nitrate, HSE:
<http://www.hse.gov.uk/pubns/indg230.pdf>

4.4.2. Origin's operations would be relocated to the south of South Dock located close to the south of the refurbished 250m of wharf to be provided. The position and site layout has been developed in consultation with both ABP and Origin and is the area labelled A3 in the port relocation plan.

4.4.3. The relocated operation would include the ability to store ammonium nitrate outside on a similar basis to Origin's current application for modification of its existing HSC.

4.5. HSC Requirements for Relocation

4.5.1. As described above, HSCs are granted by the relevant Hazardous Substance Authority which, in this case, is Newport City Council (NCC). In order for Origin to operate in its new location a new HSC will be required for that location and an application will need to be submitted to NCC. NCC will consult with HSE prior to making a decision regarding the grant of a HSC.

4.6. Current Status

4.6.1. WG have discussed the relocation of Origin with ABP and also Origin. WG and ABP met with NCC on 13th July 2017 to present an overview of the port relocation plan. Subsequently pre-application advice for a new HSC has been sought from NCC by WG by email on 13th July 2017 (Appendix 2) in relation to the proposed new location. This included a draft application and supporting information prepared by Origin including an enhanced risk assessment for the storage of ammonium nitrate.

4.6.2. NCC and WG's advisors are currently consulting with the appropriate section of the HSE. During consultation, the HSE confirmed that they require smaller storage bays (1,100 tonne) compared to Origin's current location which has 2,500 tonne bays. This is to ensure that the new operation would comply with

modern safety standards including the principles of risk being “As Low As Reasonably Practicable” (ALARP). This correspondence is within Appendix 1C.

- 4.6.3. For a new HSC to be granted, NCC will consult with the HSE to determine if the proposed location of the Origin facility is appropriate. The HSE will make recommendations based on the assessment by an HSE risk assessor who has specialist skills and knowledge to determine the potential risks and consequences from the hazardous substances in the application.
- 4.6.4. An application for a new HSC will be made by WG on behalf of Origin to NCC in due course, taking any advice received from the HSE into account.

4.7. Origin’s Proposed New Location HSC Application

- 4.7.1. Consideration by the HSE will be given to the sensitivity of the existing land uses around the proposed (new) Origin site. The HSE will also consider the safety of other businesses to be relocated near Origin as part of the port relocation plan.
- 4.7.2. Table 1 above is used by the HSE to help assess whether any new development is acceptable within the consultation zones. It would also be used by the HSE to help determine if the proposed location for the Origin site is appropriate based on existing land uses and other businesses that are proposed to be relocated as part of the ABP port relocation plan.
- 4.7.3. The port relocation plan shows the proposed businesses and operations to occupy land around the proposed Origin site. Based upon the existing and proposed land uses around the proposed Origin site, the most sensitive land use according to the HSE Land Use Planning Methodology would be buildings which have three or more occupied stories, or that are occupied by more than

100 staff at any one time (Level 2 sensitivity)⁹. Indicative occupancy levels have been assessed based on the size and operation of the relevant business to be located in the area. These indicative occupancy levels are at Appendix 3 of this evidence.

- 4.7.4. No proposed land uses are expected to fall into the Level 2 sensitivity. There is only one existing land use that falls into the Level 2 sensitivity land use category, which is the existing operation of Saica Pack UK Limited to the south-west of South Dock, which has a workforce of approximately 100 at any one time. The location of the new Origin facility is approximately 250 m away from the Saica Pack premises.
- 4.7.5. Based upon the combined consultation zones of the existing Origin and Mole Valley HSCs, the inner consultation zone of the new HSC is likely to have an approximate maximum radius of 250 m from the centre of the proposed Origin site to the outside of the inner consultation zone.
- 4.7.6. As a worst case scenario, if these same consultation zone boundaries were applied to the proposed new location for Origin, the location of Saica Pack would fall into the middle consultation zone. In this case the HSE would not 'advise against' the development of the relocation of Origin as a result of that or any other land use or proposed land use in the vicinity. As stated above these consultation zones assume storage of 9,949 tonnes of ammonium nitrate whereas the new application for a HSC for Origin will only be for storage of 4,999 tonnes so it is possible the actual consultation zones defined by the HSE may be smaller. An indicative plan showing this worst-case scenario consultation zone is shown at Appendix 4C.

⁹ Workplaces (predominantly nonretail) providing for 100 or more occupants in any building or 3 or more occupied storeys in height - <http://www.hse.gov.uk/landuseplanning/methodology.pdf>

4.8. HSC Pre-Application Response from Newport City Council

- 4.8.1. NCC has provided an initial response dated 9th October 2017 to the pre-application submitted by WG on 13th July 2017. A copy of the NCC case officer's response is provided in Appendix 5.
- 4.8.2. The response from NCC's case officer noted the following:
- a) No response has been received from either NRW or the HSE;
 - b) The public protection manager had no comment to make on the proposal;
 - c) Additional ecology surveys will be needed including breeding/over wintering birds, reptile and invertebrate surveys and also a preliminary ecological appraisal;
 - d) The highways officer commented that they did not anticipate highways issues.
- 4.8.3. The NCC case officer concluded that providing neither NRW or the HSE object to the proposal the case officer would recommend the proposal.
- 4.8.4. NRW have however been consulted on the wider port relocation plan and have responded by letter dated 26th September 2017. In their response NRW state (page 10 paragraph 2) in relation to Origin:
- "It is noted that the nature of some businesses e.g. Origin (A3) and WE Dowds (A4) will need to be set at a higher level above the established design flood levels due to potential pollution of floodwaters."*
- 4.8.5. WG's advisors will need to take this into account during detailed design.

4.8.6. As described in the Scheme Update Evidence of Dr Peter Ireland (Document 1.7.5, paragraphs 3.5) additional ecology surveys have been undertaken over the summer of 2017 to support the port relocation plan including future consenting applications. These surveys relating to the presence or otherwise of badger, otter, water vole, reptiles and invertebrates. The results of these surveys are reported in the October 2017 Environmental Statement Supplement (ESS6). Surveys relating to wintering birds are planned in the coming months with the first taking place in October 2017. An interim report on that survey will be provided in December 2017.

4.9. Conclusion

- 4.9.1. Due to the route of the Scheme impacting the inner consultation zone of Origin's current operation in Sheds 9 and 9A, Origin will no longer be able to operate from that location once the Scheme is operational.
- 4.9.2. Welsh Government has produced a port relocation plan for ABP and all tenants and occupiers of Newport Docks affected by the Scheme.
- 4.9.3. It is proposed that Origin will move to a new purpose-built building to the south of South Dock. This new location will require a new HSC in order for operations to be carried out. An application for such a new HSC will be submitted to NCC as the Hazardous Substance Authority.
- 4.9.4. A Pre-application is currently under consultation and HSE are currently considering the pre-application submission.

- 4.9.5. The guidance available for the factors taken into consideration by HSE when assessing the risk of a new HSC have been taken into account by WG and their advisors in deciding the proposed new location for Origin as well as the relocation of other tenants to the surrounding area.
- 4.9.6. I have no reason to believe the proposed new location would be unacceptable to HSE and I therefore see no reason that the new HSC could not be granted by NCC.

5. RESPONSE TO OBJECTIONS – NRW LETTER DATED 26TH SEPTEMBER 2017

- 5.1.1. Following the publication of ESS5, NRW provided a written response in a letter of 26th September 2017. In the letter, they comment on several environmental topics. This proof of evidence addresses:
- a) Potentially contaminated sediments within the dock
 - b) Environmental permitting
 - c) Geology and soils including land contamination
- 5.1.2. In NRW's response to the ESS5 they did not raise any fundamental challenges or failings for the approach, findings of the assessment nor proposed mitigation measures set out in the August 2017 ESS relating to land contamination, potentially contaminated sediments in the dock and environmental permitting.

5.2. Potentially Contaminated Sediments in Newport Dock

- 5.2.1. On page 2 paragraph 3 of their letter, NRW comment that potentially contaminated sediments may be present in North Dock and within the Junction Cut. The level of contaminants in sediments may be such that disposal of any dredgings containing such high levels of contamination may be unsuitable for disposal at sea. NRW comment in paragraph 4 on page 2 that the disturbance of contaminated sediments could lead to adverse impacts to the docks and also enter the Severn Estuary. NRW state effective management of excavated sediments would be needed during construction. However, NRW state that they do not disagree with the conclusions of the August 2017 ESS wherein the proposed works within the docks would have a neutral significance of effect of the local marine ecology.
- 5.2.2. **Response:** In order to enable off shore (sea) disposal of any dredgings during the bridge protection works the construction and creation and refurbishment of quayside areas, WG would need to obtain a marine licence (under the Marine and Coastal Access Act

2009) to do so. A marine licence application will be needed and this will include providing information to NRW marine licensing team on the chemical and physical composition of the sediments requiring disposal and an assessment of their suitability. As I have described in paragraphs 3.3.7, a programme of sediment sampling and analysis will be required which would be determined following consultation with the Centre for Environmental Fisheries and Aquaculture Science (CEFAS) on behalf of NRW such a sampling programme would be carried out based on the OSPAR guidance¹⁰.

5.2.3. Furthermore, in order to provide detailed information on the thickness of sediment and depth of rock head to enable detailed design of foundation and the quayside, further intrusive site investigation will be needed. Such a site investigation would include drilling boreholes and taking sediment samples. WG is committed to undertaking a comprehensive site investigation in the docks. During the investigation the opportunity will be taken to collect appropriate samples to determine the nature and extent of any contaminated sediments in the areas of the docks to be affected by WG's port relocation plan works. The results of the investigation will be used to help determine the control measures that will be adopted to mitigate risks from contamination migration. There are several commonly used control measures that could be adopted including:

- a) Silt curtains (installed around working areas to limit the movement of suspended solids).
- b) Sand blankets (sand is placed on the sediment surface to prevent loose sediment being easily disturbed).
- c) Environmental buckets (special dredging 'clam shell' buckets are used to excavate sediment that reduce sediment disturbance).

¹⁰ OSPAR Guidelines for the Management of Dredged Materials, ref 1998-20:
<https://www.dredging.org/documents/ceda/downloads/environment-ospar-dmguidelines.pdf>

- 5.2.4. Furthermore, the detailed design itself will include consideration of designs that minimize the disturbance of any contaminated sediments.
- 5.2.5. The site investigation results will also be discussed with NRW and their advisor CEFAS to agree whether or not sea disposal of sediments is appropriate. Should sea disposal not be appropriate, the sediments may be suitable for treatment and reuse. However land based disposal would be required if no suitable process to treat and reuse contaminated sediments could be used during construction.
- 5.2.6. Any such treatment and reuse of contaminated sediment would be discussed with NRW and an appropriate environmental permit will be obtained by the contractor.

5.3. Environmental Permits

A1 Skips Environmental Permit

- 5.3.1. On page 2, paragraph 7, NRW comment “*for the proposal set out here, NRW would require the environmental permit to be surrendered and then for the operator to re-apply for an environmental permit at the new proposed location (A5CC)*”.
- 5.3.2. **Response:** The environmental permitting strategy set out in Appendix 11.5 of the March 2016 ES sets out in sections 2.1.21-22 and Table 2 the existing environmental permit held by A1 Skips will require surrender. Whilst the March 2016 ES does not mention that a new environmental permit will be needed for A1 Skips, it is clear that an application will need to be made as part of the port tenant relocation plan.
- 5.3.3. A1 Skips’ current environmental permit (waste management licence reference EAWML 30298) allows for the storage, separation and sorting of up to 18,000 tonnes of inert waste and up to 6,000 tonnes of general and biodegradable waste per annum. As the new site is within 500 m of a European Site a new bespoke Environmental

Permit for waste activities will be required for the new location under the Environmental Permitting Regulations (England & Wales) 2016. An application for such a permit will be prepared in consultation with the operator for determination by NRW. WG's advisors have been consulting with A1 Skips regarding the surrender of the current permit and the application for a new permit.

- 5.3.4. Due to the proximity to a European designated site to which A1 Skips is to be relocated to, the application would need to include a bespoke environmental risk assessment based on NRW's guidance¹¹. The assessment would need to include appropriate control measures to ensure that the activities would not have a significant impact on the environment including the designated sites.

Sims Group UK Limited Environmental Permit

- 5.3.5. On page 3, paragraph 1, NRW comment "*Sims Metal is a scrap metal recycling yard located to the west of Middle Quay. The west fence line and access to the car park in the north-west corner of the Sims Metal plot would be moved eastwards to accommodate the re-aligned Westway Road. This may require a variation to the environmental permit to alter the permit boundary of the site. It has not been possible for NRW to ascertain this from the drawings provided.*"
- 5.3.6. **Response:** It is anticipated that a small area in the north-west corner of the site included in permit number EPR/CP3795FY may need to be surrendered in order to accommodate the realignment of Westway Road. The area of land that would be subject to partial surrender is shown on the drawing within Appendix 6. During the detailed design stage it may be possible for this impact to be avoided and thus negate any need for a permit modification.

¹¹ Risk assessments for specific activities: environmental permits:
<https://www.gov.uk/government/collections/risk-assessments-for-specific-activities-environmental-permits>

5.3.7. If a partial surrender is required WG will consult with the operator to establish what, if any, activities have been carried out in the affected area of the permit. If, as expected, no permitted activities have been carried out in this area a low risk surrender would be applied for in order to amend the permit boundary. This is a relatively straight forward administrative change to the environmental permit.

5.4. Land Contamination

5.4.1. On page 9, paragraph 7, NRW state “*NRW would broadly agree with the conclusion in the Geology and Soils Section of the ES at 2.8.40.*” NRW go on to state “*NRW agrees with the recommendation in the ES Supplement that further site investigation and risk assessment of these relocation areas is required.*”

5.4.2. **Response:** WG has committed to undertaking further site investigation and risk assessment based upon the findings of the DTS (Appendix ESS5 2.7 of the August 2017 ESS). The findings of the site investigations and risk assessments will determine the need for remediation. The site investigation, risk assessments and any remediation proposals will be discussed with NRW and NCC to seek their agreement to the need or otherwise of remediation.

6. CONCLUSIONS

6.1. Land Contamination Assessment

6.1.1. My evidence demonstrates that the risks from land contamination during construction and operation of the proposed relocation of ABP's tenants and ABP's operations have been appropriately investigated and assessed. Further investigation of the potential contaminant sources identified in the DTS and to verify the current risk levels identified will be required once more details development proposals are known. Mitigation measures and remediation will be needed to mitigate any unacceptable risks during construction and operation and this will be set out in a remediation strategy that will be agreed with NRW and NCC. In NRW's letter dated 26th September 2017 NRW has agreed with the approach being taken to assess and manage land contamination. Based on the proposed development and with the mitigation measures proposed I do not see any reason that safe redevelopment could not be undertaken with respect to land contamination.

6.2. Hazardous Substances Consents

6.2.1. The relocation of Origin will require a new HSC to be obtained from NCC. Based upon the available guidance for the factors taken into consideration by the HSE when assessing the risk of a new HSC and an initial consultation response from the HSE, the proposed relocation of Origin and the associated relocation of tenants and ABP's operations in nearby locations have been taken into account. I have no reason to believe the proposed new location would be unacceptable to HSE and I therefore see no reason that the new HSC could not be granted by NCC. Furthermore NCC's case officer for the pre-application consultation has indicated that a recommendation to grant the HSC would be made providing NRW and the HSE do not object.

6.3. Environmental Permits

- 6.3.1. A number of Environmental Permits will require modification in order to accommodate the proposed port relocation plan.
- 6.3.2. A1 Skips will be required to surrender their current permit and apply for a new bespoke permit for its relocated premises to the south of South Dock. A small area at the north-west corner of the Sims Metal permit will need to be surrendered to accommodate the modifications to Westway Road.
- 6.3.3. Based upon the guidance available and with suitable control measures in place I have no reason to believe that a new bespoke environmental permit could not be granted by NRW in respect of the operation of A1 Skips or that a partial surrender of the environmental permit of Sims Group UK Limited could not be granted.

6.4. Concluding Remarks

- 6.4.1. My Proof of Evidence includes all facts which I regard as being relevant to the opinions which I have expressed and the Inquiry's attention has been drawn to any matter which would affect the validity of that opinion. I believe the facts which I have stated in this Proof of Evidence are true and that the opinions expressed are correct. I understand my duty to the Inquiry to assist it with matters within my expertise and I believe that I have complied with that duty.
- 6.4.2. This evidence represents my true and professional opinion and is given in accordance with the Code of Professional Conduct of the various institutes of which I am a member.