

HyNet North West Hydrogen Pipeline

Delivering clean growth



Appendix 10A

Scoping Opinion and Statutory Consultation

October 2024

Revision 1

Volume

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Table 10A 1.1 Summary of EIA Scoping Opinion responses for noise and vibration

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Planning Inspectorate (PINS)	Paragraph 10.1.5 Methodology – noise monitoring. The Scoping Report proposes to scope out baseline noise monitoring for a construction noise assessment along the route of the buried pipework, except where this is considered critical for establishing an elevated baseline (for instance at receptor locations adjacent to a motorway potentially affected by horizontal drilling). The Inspectorate agrees that this matter can be scoped out of further assessment, with the exception of such circumstances as highlighted above.	Monitoring locations with the purpose of determining baselines for construction noise have been detailed in Section 10.5. The construction assessment is detailed in Section 10.9.
PINS	Paragraph 10.4.2 Methodology – vibration monitoring. The Scoping Report proposes to scope out vibration monitoring, on the basis that vibration will be assessed as an absolute (not relative) value. The Inspectorate is content with this approach.	Vibration monitoring has not been undertaken consistent with the scoping opinion.
PINS	Paragraph 10.4.2 Methodology – noise monitoring within the vicinity of the Instrumentation and Control (IC) kiosks and block valves. The Scoping Report proposes to scope out noise monitoring within the vicinity of the IC kiosks and block valves on the basis that they do not contain noise generating development and an assessment is therefore not proposed to be undertaken. The Inspectorate agrees that this matter can be scoped out of further assessment. The ES should include relevant engineering specifications to demonstrate that block valves and kiosks do not give rise to noise and vibration emissions and should demonstrate that	Relevant engagement has been undertaken with consultees with respect to noise and vibration emissions from block valves installations and possible electricity kiosks. Relevant engineering information will be presented within the Final ES to scope out block valve installations and electricity kiosks within HAGIs. The operational phase

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
	consultation has been undertaken with relevant Environmental Health Officers on this matter.	assessment will be presented in the Final ES.
PINS	Paragraph 10.4.2 Methodology – noise monitoring of existing road traffic noise The Scoping Report proposes to scope out noise monitoring in relation to existing road traffic noise on the basis that this will be determined through calculation using traffic flow data, except where baseline traffic flows are too low to comply with predictions requirements. The Inspectorate is content with this approach.	Traffic noise monitoring has not been undertaken consistent with the scoping opinion; the scope of the construction traffic noise assessment is presented in Section 10.9 .
PINS	Paragraph 10.6.7 Study area - operational phase. The Scoping Report proposes to scope out an assessment of effects beyond the study area identified for the Hydrogen Above Ground Infrastructure (HAGI), as they are considered to have the potential to generate noise during operation and there is no mechanism for the propagation of sound from pipework and valves that are buried. The Inspectorate agrees that there should be no noise associated with the operation of the buried pipeline itself during the operational phase and is content this matter can be scoped out of further assessment.	Operational aspects beyond the HAGI scoped out. The operational assessment will be presented in the Final ES.
PINS	Table 10.5 Construction phase - pipe laying activities for human receptors, quiet or important outside leisure areas beyond 100 metre (m) from the centreline of the pipe route. The Scoping Report proposes to scope out pipe laying activity for human receptors, quiet or important outside leisure areas beyond 100m from the centreline of the pipe route, on the basis that it is a short-term activity. The Inspectorate notes a 300m study area from the	The study area for pipe laying activity has been increased to 300m from the boundary of new build infrastructure, assessment outcomes are reported in Section 10.9 .

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
	boundary of new build infrastructure was adopted for the Hynet North West Carbon Dioxide Pipeline. In light of the similar nature of the proposals, the Inspectorate considers that the potential for significant construction noise effects within a 300m study area should be addressed in the ES.	
PINS	Table 10.5 Construction phase - adverse health effects. The Scoping Report proposes to scope out adverse health effects during the construction phase on the basis that noise levels from the construction is unlikely to be sufficiently high or for a duration to result in adverse health effects. In addition, the health of human receptors will be protected via the avoidance of noise levels above the SOAEL and controlled via a CoCP. The Inspectorate agrees that this matter can be scoped out of further assessment.	Assessment of health effects scoped out.
PINS	Table 10.5 Operational phase - noise from HAGIs where these only contain block valves. The Scoping Report proposes to scope out noise from HAGIs during the operational phase where they only contain block valves, on the basis that they do not contain noise generating equipment. The Inspectorate agrees that this matter can be scoped out of further assessment. The ES should include relevant engineering specifications to demonstrate that block valves do not give rise to noise emissions and should demonstrate that consultation has been undertaken with relevant Environmental Health Officers on this matter.	Consultation has been undertaken. Block Valve Installations (BVIs) are scoped out because they do not contain equipment that is likely to generate significant noise and all potential sound generating equipment is buried.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
PINS	Table 10.5 Operational phase - effects due to vibration from operation of equipment at HAGIs. The Scoping Report proposes to scope out effects due to vibration from operation of equipment at HAGIs during the operational phase, on the basis that there is no rotating machinery at HAGIs. The Inspectorate agrees that this matter can be scoped out of further assessment. The ES should include relevant engineering specifications to demonstrate that there are no sources of vibration producing equipment and should demonstrate that consultation has been undertaken with relevant Environmental Health Officers on this matter.	Consultation on this matter has been undertaken and the evidence base presented in Section 10.7 .
PINS	Table 10.5 Operational phase – maintenance. The Applicant proposes to scope out an assessment of maintenance activities during the operational phase, on the basis that any activities are likely to be minor in nature in terms of noise generation, and of a short duration. The Inspectorate agrees with this approach in principle; however the EIA should secure a notification process for noise sensitive receptors affected by pigging activities in the vicinity of HAGIs, this should include consultation with relevant Environmental Health Officers regarding indicative noise levels.	A proposed notification process has been agreed with relevant consultees and added to the project commitments.
PINS	Table 10.5 Operational phase - road traffic for maintenance. The Applicant proposes to scope out road traffic associated with maintenance during the operational phase, such as staff attending site via car or van. The Inspectorate is satisfied that such traffic movements are	Maintenance traffic scoped out.

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	likely to be infrequent and unlikely to give rise to any likely significant effects and therefore this matter can be scoped out of further assessment.	
PINS	Table 10.5 Operational phase - adverse health effects. The Applicant proposes to scope out adverse health effects associated with the operational phase of development, on the basis that noise will be controlled through design and provision of mitigation, to levels established through assessment in accordance with BS 41421. The Inspectorate is content with this approach.	Health effects scoped out.
PINS	Paragraph 10.5.4 Mitigation measures. The Scoping Report refers to noise mitigation measures, including enclosures. The ES should address the potential adverse effects of mitigation measures in the relevant aspect chapters of the ES (e.g. Landscape and Visual) where significant effects are likely to occur.	Should operational mitigation measures be proposed as part of the Final ES, the potential adverse effects will be addressed from a LVIA perspective where necessary.
PINS	Paragraph 10.7.12 Construction site noise and haul routes. The Inspectorate notes that the duration of effect criteria applied in addition to Category A, B, C criteria equate to the noise insulation criteria in BS 52282. The ES should explain why the ABC method has been modified in this way and justify the approach, demonstrating that the bar for identification of a likely significant effect has not been set artificially high. The Applicant should seek agreement from relevant local authorities regarding the final criteria where possible.	The ABC method does not provide specific criteria for noise levels over a shorter period of time than a month, which could occur on linear infrastructure projects, paragraph E.3.2 of BS 5228-1:2009 +A1:2014 states: "If the site noise level exceeds the appropriate category value, then a potential significant effect is indicated. The assessor then needs to consider other project-specific factors, such as

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
		the number of receptors affected and the duration and character of the impact, to determine if there is a significant effect. The noise insulation noise trigger levels and temporal criteria has therefore been included to fill the gap of the ABC method. The noise trigger level criteria has been simplified from BS 5228 to consist of the three most common times, which match that of Category C, being 75 dB for the day, 65 dB for the evening and 55 dB for the night. It is noted that this does not preclude assessing Category C noise for one month or more where sufficiently high baseline levels have been identified. Consultation on this matter has been undertaken.
PINS	Migratory fish species. The Applicant's attention is drawn to the Inspectorate's comments regarding impacts to migratory fish.	Works during construction or operation have the potential for significant underwater noise or vibration effects within waterways with migratory fish. Screening calculations will be prepared in order to determine if underwater noise and vibration should be scoped in or out of the construction phase

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		assessment. The results will be provided within the Final ES.
Canal and River Trust	The Trust own, manage and operate the Trent & Mersey Canal, Weaver Navigation (part of which we only have a right of navigation for) and parts of the former St Helens (Sankey Canal). The Trust also own and manage the Anderton Boat Lift, a Scheduled Ancient Monument and Grade II* Listed Building. As land owner/ operator of the waterways the Trust would wish to see any potential impacts on; our waterway users (boaters, towpath users and wildlife); infrastructure (the canal, bridges, culverts, towpaths, embankments etc); or the habitats that our waterway support; fully identified and addressed within the ES and supporting application documents. It is extremely important that our waterways and navigational safety along the canals both during construction and operation of the development are maintained. The proposed works, construction routes and construction compounds have the potential to impact on the waterway infrastructure.	Noise and vibration sensitive resources have been considered within the Draft ES. Heritage assets are considered in Chapter 6: Historic Environment . Effects on wildlife are considered in Chapter 5: Biodiversity . The removal of the proposed Tata Spur means that the Project will not have the potential to affect the Anderton Boat Lift.
Canal and River Trust	The Trust agree that noise and vibration should be scoped into the Environmental Statement. The waterway corridors are tranquil spaces and contribute to the health and wellbeing of the nearby residents and users (boaters, anglers, commuters, leisure and recreational users on the towpath). These spaces should be protected from intrusive forms of development and any potential impacts such as noise should be kept to a minimum. We would ask that waterways and their users are included as noise sensitive receptors in the assessment. The proposal both during construction and future operation has the potential to impact on users of the waterway from noise and vibration. This includes boaters (both residential and leisure users) and recreational users along the canal	Noise and vibration sensitive receptors have been considered within Section 10.7 . Permanent moorings are considered with the same criteria as residential receptors, whereas the towpath and canals are considered in the same manner as Public Rights of Way, i.e. receptors are transient.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
	towpaths, as well as wildlife. We consider that boaters/canal users/wildlife should be considered as specific receptors in terms of noise and mitigated accordingly.	
Cheshire West and Chester Borough Council	With regard to construction noise, it is proposed that baseline noise assessments are not required, the intention is to consider Category A, as per BS5228, applies at all locations as a default position. It is noted that the applicant wants to reserve the right to conduct background surveys at specific locations and review the Category against BS5228 with a view to re-evaluating the category depending on the outcome of the background survey. The Council's EPU would advise that we consider this approach to construction noise appropriate for the purpose of laying of pipes and construction of HAGIs and Block Valves (BVs).	Further consultation on this point has been undertaken. Assessing construction noise against the existing ambient noise environment follows the examples within BS 5228.
Cheshire West and Chester Borough Council	Paragraph 10.1.6 confirms that best practice will be embedded within site management and construction operations taking measures from the Code of Construction Practice and ensuring their implementation through the CEMP(s) (Construction Environmental Management Plan).	Best practice measures have been embedded in the Project and are detailed in Section 10.6 .
Cheshire West and Chester Borough Council	Site compounds and depots will need to be assessed on a site-by-site basis and will need to meet the requirements of Planning Policy DM30 regarding noise and hours of operation.	Noise effects from individual site compounds and depots have been considered within Section 10.9 . Planning Policy DM30 has been included as part of the assessment criteria.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Cheshire West and Chester Borough Council	Traffic noise will be assessed via utilising the CRTN [Calculation of Road Traffic Noise] tool and given the volume of traffic associated with the construction phase and the transient nature at most locations. The Councils EPU [Environmental Protection Unit] have no concerns on this especially given the proposed hours of work are between 08:00 and 18:00 Monday to Saturday. Out of hours work will need assessing inline with Policy DM30 but traffic noise is not likely to be significant except perhaps at depot sites / construction compounds. Onsite vehicle movements at depots will need to be assessed in accordance with DM30 and specifically BS4142. with Policy DM30 but traffic noise is not likely to be significant except perhaps at depot sites / construction compounds. Onsite vehicle movements at depots will need to be assessed in accordance with DM30 and specifically BS4142.	Mobile construction plant on a construction site falls within the remit of BS 5228 and not BS 4142. Further consultation on this point has been undertaken.
Cheshire West and Chester Borough Council	Likely significant events The Councils EPU agree Table 10.4 as realistic scenarios where further assessment will be warranted. Regarding Table 10.5, Elements Proposed to be Scoped Out - In terms of operational noise it is proposed to scope out pipeline noise and Block Valves (BVs). The Councils EPU have no objection to the screening out of pipeline noise and in principle we would agree the approach of a BV but as no indicative noise levels have been provided that we could find to support the screening out of BVs, we would advise that further supporting information is provided before agreeing this	No data is provided for Block Valve Installations, however all equipment with the potential to generate noise within a BVI is buried underground.
Cheshire West and Chester Borough Council	The Councils EPU agree to the proposal to scope out Instrumentation Kiosks.	Kiosks are scoped out of assessment consistent with the scoping opinion. Evidence will be presented as part of the Final ES.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Cheshire West and Chester Borough Council	Operational noise assessment is therefore directed toward HAGIs with pressure reduction units. Pigging is screened out as an infrequent exercise but again, similar to BV noise, there are no indicative levels to support this and again we would advise against doing so until further information is submitted. Pigging is a necessary operation, if the impact is significant then it needs to be identified at this stage and not omitted because of frequency. On provision of acceptable further information supporting its removal from the assessment process then we will happily agree this.	Operational noise sources are currently being reviewed. An operational noise assessment will be presented in the Final ES.
Cheshire West and Chester Borough Council	10.7 Assessment methodology With regard to Table 10.6, “Establishing the sensitivity of the receptor”, the Councils EPU advise that for those elements where construction noise is likely to be short in duration, limited to weeks rather than months, the criteria is acceptable. However, where there is exposure over a prolonged time then the definition does not hold and those elements in the medium category should be elevated to the high category in such circumstances. Short term there is scope for them to adapt but there are time constraints on this and this should be factored in and would better align with Table 4.1. Operational noise is assessed through other means as discussed elsewhere.	Further consultation has been undertaken to discuss the sensitivity of receptors and agree an approach with relevant Environmental Protection Units for the Draft ES. The duration of the works are considered as context when qualifying the significance of effect rather than changing the sensitivity of the receptor.
Cheshire West and Chester Borough Council	Determination of significance – construction site noise and haul routes With regard to the matter of magnitude and in the context of Table 4.2 and 10.7, the Councils EPU recognise the difficulty in applying this principle to assessment criteria which already inherently include the concept of magnitude. Consequently, we strongly disagree with the criteria laid out in para 10.7.12. It would only be marginally more acceptable if it were applied to a working day window. The incorporation of an additional and/or criteria of an increase of 5dB(A) over the relevant/applicable category, be that	The reference to Category C aligns closely with the Trigger levels for noise insulation in BS 5228 which has a lower temporal requirement of 10 days. The purpose of this approach is to cover the assessment of noise where it is less than one month (which is the temporal threshold for the ABC method). Further

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	Category A, B or C would provide better sense and more in line with BS5228.	consultation has been undertaken to discuss the magnitude of impact and an approach has been agreed with relevant Environmental Protection Units.
Cheshire West and Chester Borough Council	In any event out of hours working as specified in DM30 of the Local Plan shall only be considered on a site-by-site basis and will require more detailed analysis and justification. That justification only likely to be supported in the event of health and safety reasons when works cannot be undertaken safely between the hours of 08:00 and 18:00 or in the event of crossings to minimise time.	24-hour working is likely to be required for trenchless crossings and also roadworks as described in paragraphs 2.5.14 , and 2.5.15 in Chapter 2: The Project
Cheshire West and Chester Borough Council	Determination of significance – construction traffic noise on public highway The Councils EPU agree the content of Table 10.8. Given the nature of the development and the number of vehicle movements likely, most reasonable scenarios will see a negligible or low magnitude based on the criteria advocated in Table 8, the greatest impact will be on approach roads to depots/compounds where heavy plant is stored overnight or else at the point where construction is ongoing, this latter being likely short lived in duration. Any scenario outside the negligible category is only likely to occur on roads with existing very low traffic levels. Whilst again the criteria applied in para 10.7.12 is applied in para 10.7.14 for medium or high magnitudes, and our concerns over the absurdity of their application remain, we do not consider this to be a high risk matter away from depot locations. On approach roads to depot locations the movement of traffic is likely to only be an issue at night and then only for brief periods of time and in any event night working will have to be subject to separate approval and justified. Ultimately depot location selection should ensure these factors are considered in the selection criteria and weighted accordingly. In other	Construction traffic on public highways is assessed against construction criteria within the Design Manual for Roads and Bridges. Comment on compound location selection is noted.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
	words, do not choose a depot/compound location where traffic movements are likely to result in residential complaint.	
Cheshire West and Chester Borough Council	Determination of significance – construction vibration The Councils EPU agree the levels in Table 10.9 and note that damage resulting from construction vibration is an issue that has to be dealt with privately, levels set out in Table 10.10 should not occur and activities which identify potential for elevated levels should be carefully planned and subject to review to identify alternative construction measures.	Construction vibration will be managed through the application of the CEMP. The CEMP will detail procedures to monitor, minimise and mitigate any such vibration.
Cheshire West and Chester Borough Council	Operational Assessment methodology The Councils EPU note para 10.7.22 and advise a precautionary approach is advocated to deal with uncertainty. We note para 10.7.25 but generally we support a rating level of 5dB below background but that can be relaxed for areas with very low background levels, within that context we agree the content of para 10.7.28.	An operational noise assessment will be presented in the Final ES.
Cheshire West and Chester Borough Council	Non-routine operation The Councils EPU agree para 10.7.32 and 10.7.33	Noted. No action required.
Marine Management Organisation	The MMO recommend that the potential impacts of underwater noise and vibration on marine receptors from the construction/installation operations and machinery are considered in the ES. The receptors that are listed in section 5.4.28 of the Scoping Report are migratory species, therefore consideration should be given to any overlap of the works with key sensitive migration periods.	Screening calculations will be prepared to determine if underwater noise and vibration should be scoped in or out of the construction phase assessment. The results will be presented within the Final ES.

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Marine Management Organisation	The MMO also recommend that the ES adequately describes all activities that will generate underwater noise, as well as the proposed working hours and duration of activities. The MMO note that construction is expected to commence in 2025 with commissioning in 2027. The Project would be fully operational from late 2027 to early 2028. Typical construction hours can be 10 hours per day (08:00 to 18:00) from Monday to Saturday. Limited 24-hour working would be required for some activities such as trenchless crossings where they need to be completed as a continuous operation as well as pipeline testing (see section 2.6.3 of the Scoping Report).	
Marine Management Organisation	In terms of mitigation measures, a number of embedded environmental measures (as per section 5.5) have been proposed although these are largely concerned with terrestrial ecology. The MMO will be able to further advise on mitigation once an assessment of the potential impacts has been undertaken.	
Trafford Council	The ES should include an assessment of the effects of noise and vibration on nearby properties during the construction phase and set out appropriate mitigation to minimise potential disturbance.	Construction assessment results are provided in Section 10.9 .
Trafford Council	Chapter 10 of the Scoping Report describes the scope of the noise and vibration assessment and how it will consider the likely significant effects on residential and non-residential receptors that may arise from the construction and operation of the project. This chapter describes the methodology to be used within the EIA; the datasets to be used to inform the EIA; an overview of the baseline conditions; the likely significant effects to be considered within the EIA, and how these likely significant effects will be assessed.	

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Trafford Council	The Council's Pollution and Housing Section has reviewed the Scoping Report and are satisfied that the criteria identified for use/reference within the EIA process for assessing construction and operational impact are sufficient. The information provided is comprehensive and appears to include everything of relevance in respect of nuisance impact from noise and vibration	No action required.
Warrington Borough Council	Comments from the WBC Environmental Protection Team have been received and the full response will be attached to this response but they are also summarised below: No baseline surveys have been carried out yet and are only likely to be carried out where critical for establishing an elevated baseline for drilling.	No action required.
Warrington Borough Council	Expect baseline surveys will be necessary around HAGI areas where these are close to residential. So potentially for Warrington – the Arpley HAGI and Penketh HAGI. Noise is intended to be designed out. Baseline surveys to occur in 2022. Ambient baseline where operational noise may be observed beyond site boundaries in accordance with BS4142:2014 +A1:2019.	Survey details are shown in Section 10.4 . Please note the reduction of HAGI locations in Warrington.
Warrington Borough Council	Background and ambient sound measurements at representative receptors close to be adversely impacted by HAGI's containing PRU's, metering facilities and pigging facilities. Ambient and background noise at locations representative of residences near to proposed construction compounds. Baseline will be long term unattended plus attended surveys – timed to avoid school holidays.	Survey details are shown in Section 10.4 .

Consultee	Consideration	How addressed in Chapter 10 of the Draft ES
Warrington Borough Council	Agree consultation with LPAs is necessary to agree distances	Distances from site to noise sensitive receptors have been agreed with local planning authority where required.
Warrington Borough Council	Agree BS5228 is the correct one to utilise for construction impacts	No action required.
Warrington Borough Council	Discusses pipeline insertion crossing major roads and railways. Overnight works may be required. Otherwise will be daytime. No specific detail of level of impact in Warrington from Solvay to Novelis – all roadway and no open space involved. Need information within the ES as to whether special considerations will relate to this. Information only mentions road crossings but information is required on where the entire roadway may be pulled up for linear pipeline installation as is expected between Solvay and Novelis. Does include reference to drilling – ES should include location and details of any drilling to be used in WBC area to minimise highway excavations?	Details of the construction approach to road crossings are discussed in paragraphs 2.4.33 , and 2.4.34 in Chapter 2: The Project . Exact location of works is not available at this stage (they are subject to LoD), but representative locations have been used to assess noise and vibration impacts where there are potential significant effects on noise and vibration sensitive receptors. The methods by which noise and vibration will be controlled are set out within the CEMP.
Warrington Borough Council	Warrington has a lot of Noise Important Areas for Planning (DEFRA Noise Mapping Information) and these need to be considered	Noise and vibration sensitive receptors have been considered and are described in Section 10.4. The presence of Noise Important Areas (NIAs) is acknowledged. however, increases in noise due to construction

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		traffic is temporary and will not significantly affect the NIAs permanently and as such these are not considered within this chapter.
Warrington Borough Council	For both of these proposed HAGI installations, further information will be required identifying potential operational noise impacts on existing residential dwellings but also whether there will be impacts on existing commercial and agricultural activities in the vicinity of these sites.	The only Project HAGI within Warrington Borough is Higher Walton. The receptors at this HAGI are defined in Section 10.4 . An operational noise assessment will be presented in the Final ES.
Warrington Borough Council	Solvay Interlox/Ingevity both share the same overall site and area. There are existing residential dwellings to the North East and East of this site. Whilst information has been provided on HAGI areas and the general pipeline, no information has been provided on likely noise or other impacts that may arise from the final connection from the pipeline to these end users. Whilst we do not necessarily expect adverse impacts to result from such end user connections, some appraisal of impacts should be included to inform any subsequent formal application along with any controls or mitigation measures that may be necessary.	Further details are provided in Section 10.7 . Operational noise sources associated with maintenance of the HAGIs, such as pipeline inspection operations, are scoped out of the assessment. As such, the noise assessments requested are not possible. Such assessments may be available at a later stage, but not with respect to this DCO application.
Warrington Borough Council	As with Solvay/Ingenity, there are residential dwellings immediately to the East of Novelis as well as over the Ship Canal to the South. Again, consideration of any noise impacts from the final connection of the pipeline to these dwellings needs some detail provided.	

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Warrington Borough Council	Expect baseline surveys will be necessary around HAGI areas where these are close to residential. So potentially for Warrington – the Arpley HAGI and Penketh HAGI. Noise is intended to be designed out. Baseline surveys to occur in 2022. Ambient baseline where operational noise may be observed beyond site boundaries in accordance with BS4142:2014 +A1:2019.	Surveys have been conducted and have been discussed in Section 10.4 . Please note the reduction of HAGI locations in Warrington.

Table 10A 1.2 Summary of Section 42 Consultation responses for noise and vibration

Consultee	Consideration	How addressed in this Draft ES
Cheshire West and Chester	The Councils EPU acknowledged that the Code of Construction Practice will be adhered to and will provide suitable protection to residents in relation to noise and vibration impacts on amenity and meets the requirement within the Local Plan. The EPU recommends where work is required outside of permitted hours, or within close proximity to sensitive receptors, additional measures will be required to reduce impacts of noise, and night-time work should only be considered as a last resort. The EPU provided observations were provided for the number of impacts and need for the consideration of caravans at traveller sites for particular trenchless crossings. The EPU also stated it would utilise Section 60 Notices on a crossing by crossing basis and seek to restrict work hours where unacceptable issues arise.	Comment is noted, in particular the use of Section 60 notices. The construction noise assessment trenchless crossing has been updated as described in Chapter 10.9 .
Cheshire West and Chester	The Council noted the pipeline would cross the proposed HS2 line, and the construction of the HS2 line and subsequent vibrations from the trains once the line is complete could have adverse impacts on the pipeline.	Comment is noted, however due to the current status of the HS2 Phase 2b line (very unlikely to be developed) no further action is required.
United Utilities	United Utilities requested that the impact of the proposed development includes an assessment of any potential settlement and vibration on United Utilities' assets. Similarly, any loading on United Utilities' assets during operation or during construction requires further consideration with United Utilities.	The Applicant is in regular contact with United Utilities on matters such as the interaction of the Project with existing assets.
Warrington Borough Council	It was acknowledged that the updated proposals have further defined the proposed options for route alignment through the Warrington area. The number of HAGI's has been reduced to two options along the northern edge of the Ship Canal along Acton Grange. The areas around the HAGI site is fairly remote with relatively few dwellings within a close proximity to them. A further	Noted, no action required.

Consultee	Consideration	How addressed in this Draft ES
	HAGI exists at Warburton which is circa 500m from the Warrington boundary. It is noted that detailed acoustic assessments will occur to establish noise levels within a 500m study area around such HAGI's. Vibration is not thought to pose a problem at such sites."	
Warrington Borough Council	The construction times for routine work is noted and is stated between 08.00hrs to 18.00hrs Monday to Saturday with no works on Sundays or Bank Holidays. It does however define that there will be the need for 24 hour working at some sites including Tunnelling and Horizontal Directional Drilling, pipe pulling at trenchless crossings and pipeline testing. Given there are a number of trenchless crossings in the Warrington Area for crossing main roads, canals and other infrastructure then we would expect to be given prior warning for such events and would expect that local residents are also given prior and advance warning.	The updated construction phase assessment is detailed in Section 10.9 . Construction work will be managed through the application of the CEMP. Work outside of regular construction hours will seek agreement with the Council, and local residents will be notified of such works.
Warrington Borough Council	The proposed hours are also beyond what we would normally allow for Warrington Construction Activities, especially given the Saturday afternoon elements. If the works are transient and rapid – eg open trenching, then this would not pose any significant risks and we would not raise any comment, however, where road excavations are involved which are inevitably much slower, then the acceptance of weekend working all day on a Saturday will very much depend on how long the activity will be by any sensitive receptor. Given the timing and duration of such works is currently unclear when significant roadway excavations are undertaken then we cannot provide further comment at this stage apart to highlight that significant adverse impacts on residential amenity are feasible – especially for the Novelis Spur detailed below. Additional mitigation may be required for any 24 hour works to minimise impacts on residential amenity.	The updated construction phase assessment is detailed in Section 10.9 . Construction work will be managed through the application of the CEMP. The CEMP will detail procedures to monitor, minimise and mitigate any such impacts.

Consultee	Consideration	How addressed in this Draft ES
	Sufficient detail has not been provided at this stage for such mitigation so we would welcome further discussion on what would be acceptable for Warrington residents on this matter."	
Warrington Borough Council	The pipeline routes now follow more precise and defined routes which enables more detailed analysis on potential impacts to occur. The Incoming spur from the West enters the borough crossing the M56 circa 500m SW of Hatton then has a choice of routes either westward (going near to Daresbury Hall – Halton) or northerly (2 options) crossing through either NW or SE of the Creamfields grounds. They then join before the Walton Hall area, crossing the A56 and skipping East from Moore. A few options exist depending upon which HAGI site will ultimately be used – Porch House Farm is noted as being between the two options. The route then crosses the Ship Canal to link with the Northern route. A variety of trenchless compounds are required along here to pass under the Ship Canal, the WCML and the Bridgewater Canal. There are a number of residential dwellings that will be close to working areas, especially given the proximity to Moore and the Western edges of Higher Walton and the increased trenchless pipe laying that will be required.	Noted. The updated construction phase assessment is detailed in Section 10.9 .
Warrington Borough Council	The Northern spur originates from the HAGI along Acton Grange Wharf – along the north side of the ship canal. It then heads westwards avoiding Arpley Landfill site then crossing the Mersey near to the Fiddlers Ferry Lagoons. It then heads in a NNW direction across the agricultural fields East of Fiddlers Ferry, crossing and then passing to the West of Rose Tree Farm across Widnes Road before then crossing Farnworth Road, west of Four Top'd Oak. It then turns in a north westerly direction and out beyond the Warrington area. This portion of the route does successfully avoid being close to many residential dwellings although will be close to a number of established farmhouses along the route - some will be closer to the workings and within measurable distances for noise survey purposes. It is noted that the bulk of	Noted, no action required.

Consultee	Consideration	How addressed in this Draft ES
	these areas will however be utilising open trench pipe laying – so the works will transit past these areas in a short space of time with resultant impacts being limited to the short duration of works in the area.	
Warrington Borough Council	The Solvay Spur is short and runs along the northern edge of the canal from the HAGI site, under the WCML then on to the Solvay Boiler Plant area. This does not pass close to any existing residential dwellings and therefore is considered to have a low impact for it's development and commissioning. The Novelis Spur is by far the most disruptive proposal and will have potentially significant associated concerns with the routing. The proposal routes the pipeline across Chester Road near the Centre Park link junction then down Gainsborough Road and Loushers Lane. From there it traverses Station Road down to the Knutsford Road Ship Canal Bridge. It then traces the edge of the ship canal until it reaches the main entrance to Novelis whereby it enters the site and runs to the back of the site near to Hamilton Close before terminating. This entire route runs through heavily populated areas with predominantly individual dwellings being present along both sides of Gainsborough Road and Loushers Lane then passing apartments along both sides of Station Road and again passing further apartments after crossing Knutsford Road along the canalside at Clearwater Quays. Further older dwellings are passed to the side of Clearwater Quays up to the roundabout where it joins Thelwall Lane. A range of townhouses and other dwellings will then face the pipeline route on Thelwall Lane on the former 'New World' site up to the point where it diverts into the Novelis site. Given the fact that most of this route will be along/under existing highways then the level of disruption will be greater and over a much longer period of time (given the significantly slower and more intrusive works required compared to open trench installation) than for any other section of the Warrington routes.	The worst-case durations for construction works, and associated BS 5228 noise level limits will be used to assess the potential construction noise impacts. The updated construction phase assessment is detailed in Section 10.9.

Consultee	Consideration	How addressed in this Draft ES
Warrington Borough Council	WBC noted the references to various relevant British Standards and Construction Guides that are to be implemented however regardless of that, the abovementioned route (Novelis Spur) will be the element that creates the greatest level of adverse impacts and potentially for prolonged periods of time on residential amenity for the entire project within Warrington. Not only Noise and Vibration will need detailed assessment but the length of time that the works will be in any given area also needs consideration. Night time works in such areas will be disruptive to sleep, daytime works will be disruptive to traffic flows. A detailed assessment of all resultant impacts needs to be undertaken to minimise any such adverse impacts along this entire section of the route. Higher levels of mitigation may need to be undertaken to protect residential amenity. A highly detailed CEMP would therefore be recommended for this area and we would need to see and agree to the elevated levels of mitigation required for this stretch given the level of impact and number of dwellings that this element of the proposal will adversely impact upon.	An Outline CEMP will be provided as a as part of the Final ES with a final, detailed CEMP secured by DCO requirement.
Warrington Borough Council	The Eastern Spur mainly bypasses the Warrington area, brushing through the edge of the borough near to Agden. It is mainly open trench installation however the crossing of the Bridgewater Canal by Agden Bridge Farm will be by Trenchless Crossing and therefore may have localised adverse impacts. Beyond the canal and in this general area then there are sporadic farmhouses which will be impacted however given the open trench installation then the impacts will be of short duration given the speed of installation. A HAGI to the North – within Trafford MBC administrative areas, is noted however this is likely to be in a position which will be well beyond the Study Area for any WBC properties and therefore should not be adversely impacted by the installation.	Noted, no action required.
Canal & River Trust	Noise and vibration (chapter 10) The chapter appears very comprehensive in terms of the likely issues/impacts generated by the construction works and ongoing operations. It identifies noise	Noted. Individual receptors will be considered for construction and operational noise in the Final ES.

Consultee	Consideration	How addressed in this Draft ES
	from trenchless crossings and construction traffic as both being 'significant' with regards to relevant noise legislation/British Standards. We note that there will still be noise from the remainder of the works, although this will be typically quieter and/or transient when considering individual receptors being affected.	
Canal & River Trust	Vibration magnitude will be assessed as an absolute (not relative) value, so vibration monitoring will not be undertaken. The subsequent Environmental Statement will include a vibration assessment for each vibratory activity once further location details are known for activities such as piling and road rolling. In terms of vibration impact on our infrastructure (including heritage assets), we would have concerns in terms of the potential impact on our waterway infrastructure including cuttings and embankments as well as the associated bridges, locks and tunnels. Our infrastructure is over 200 years old and not built to modern engineering standards and as such would be susceptible to vibration. We consider that this matter should be addressed and might require vibration monitoring to be undertaken during the works.	As set out in Table 10.9 of the Draft ES, heritage assets will be considered when identifying sensitive receptors. If there is a residual risk posed to heritage assets after any required mitigation is undertaken in the Final ES, vibration monitoring will likely be included within the CEMP as a requirement when working within the vicinity of such assets.
Canal & River Trust	In terms of noise receptors then boaters/moorings along our waterway corridor ought to also be considered and assessed in terms of noise disturbance and mitigation provided accordingly.	As set out in Table 10.9 of the Draft ES, permanent residential moorings are considered as noise sensitive receptors for both construction and operational noise impact assessments. An operational noise assessment will be presented in the Final ES.
Davenham Parish Council	Safety Scheme SP1 runs parallel to the electrified railway line (gas & electric in such close proximity?) I asked if this cleared the safety & viability review and what were the possible impacts of digging trenches so close to the main Liverpool to	In accordance with the Basic Asset Protection Agreement (BAPA), where road surfaces are in good condition, vibration from heavy

Consultee	Consideration	How addressed in this Draft ES
	London Line? Has the potential impacts to the structural integrity of the railway embankment been thoroughly assessed? The vibration of large vehicles, plus the pollution from additional vehicle emissions, and mud carried by vehicle tyres from the Lane could be detrimental to the health and wellbeing of the residents and residents properties	vehicles is normally negligible at the roadside. A commitment has been included to review and repair surfaces where it is considered there will be a potential vibration impact. In addition, the route will be reviewed for locations where vibration sensitive receptors are directly adjacent to the road to check whether there would still be a risk despite this mitigation and as part of the Final ES would assess as appropriate and mitigate where possible.

HyNet North West Hydrogen Pipeline

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