

INTERESTED PARTY NUMBER: [REDACTED]
APPENDIX 2: RESPONSE TO CHANGE 1: HOVERPORT

Submitted by David Stevens, physicist

Executive summary

- NG original access plans in October 2023 showed a total disregard for the protection of the saltmarsh.
- Between October 2023 and July 2024 NG decided to use the hoverport site as access for construction traffic.
- In September 2025, NG said that *“this area [the hoverport] was included within the Order Limits too late to be included in reptile survey”*.
- NG had between 15 and 23 months (between October 2023 and September 2025) to carry out a detailed survey of the hoverport but decided not to do so.
- In September 2025, NG tried to justify this decision by implying that since the *“hoverport will only be used for operational monitoring and maintenance access”* a survey wasn’t necessary.
- Documents released by NG in the same month contradicted this assertion by itemising the equipment that would use the hoverport for access to carry out construction including four 15-20t excavators.
- In October 2025 NG applied for 5 changes to DCO including changing the order limits at the hoverport.
- There is a health and safety risk as well as potential loss of amenity with NG potentially using most of the hoverport apron.
- NG removed the construction compound from the hoverport over concerns raised about the presence of rare invertebrates but then included most of that area within the new order limits.
- NG provide a table that is supposed to give the “worst-case noise and vibration” list but it omits all the noisiest machinery that is likely to use the hoverport.
- The hoverport was constructed using a base consisting of 300,000t of colliery spoil.
- Colliery spoil typically contains heavy metals including Arsenic, Lead and Copper.
- This base was covered by concrete slabs, but these are breaking up.
- NG have not carried out a detailed survey and have not highlighted the potential dangers of heavy metals leaching into the SSSI.
- The weight and frequent movements of the excavators and piling machine greatly increase the risk of heavy metals leaching into the SSSI.
- Heavy metal pollution demonstrates serious risks to coastal biota, including fish, shellfish, algae, and marine mammals through mechanisms such as bioaccumulation and biomagnification.
- The exit pits will result in 400m³ of sediment which NG plan to just deposit within the order limits.
- These sediments may also contain heavy metals and other pollutants.
- Has any detailed survey been done by NG in line with MMO regulations and guidance.
- NG reached agreement with Natural England for a 60dB L_{max} threshold, but NG decided to use 60dB average L_{max} instead which is completely unacceptable.
- No 60dB L_A contours (average or max) were shown at the hoverport or exit pits which is unacceptable.
- Permission for the change of order limits should be refused for the reasons indicated.

Background timeline

National Grid (NG) held Statutory consultations between October and December 2023 and the documents available to the public at that time did not indicate any use for the hoverport site. The PIER Volume 1 Part 3 states:

“The landfall would be a committed trenchless crossing under the sensitive salt marsh habitat within the Pegwell Bay designated sites and this trenchless crossing will also include St Augustine’s and Stonelees Golf Course.” (PIER volume 1 Part 3)

However, the October 2023 plans (**General Arrangement Plans Version A**) showed the two access routes for the construction machinery as going straight through the saltmarsh:



For clarity, the two access routes shown are either side of the petrol station at Pegwell with the left-hand route being adjacent to the scar left from the Nemo project.

Using these routes would have caused irreparable harm to a protected habitat and showed the NG attitude to protecting habitats at that time.

In July 2024, NG produced amendments to their plans which included, for the first time, the use of the hoverport site for construction, maintenance and a construction compound. NG explained, quite rightly, that this was to avoid damage to the saltmarsh during construction but why this had not been obvious to them before is difficult to understand.

In November 2024 NG submitted amended plans that removed the compound from the hoverport

Unfortunately, the amended plans had an access point to the intertidal area from the hoverport apron that passed through existing saltmarsh. Again, this calls into question the priority NG give to safeguarding habitats when making important decisions.

NG applied for development consent in March 2025, and this was accepted for examination in April 2025 despite no detailed environmental survey having been done of the hoverport.

In October 2025, NG applied for 5 changes to the proposed development consent order including changes to the order limits.

Change 1 – Access to the hoverport near Cliffsend, Kent.

1) Lack of Clarity

a) The area available to the public

The change to the access asked for would result in a much larger area of the apron being set aside which is contrary to the Mitigation requirements in the NPS EN1.

“5.4.35 - Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works.”

The applicant is very vague and as this is a popular and valued site for residents to enjoy the flora and fauna, there is a potential health and safety risk with the lack of certainty over the areas being used for the project and the areas that are safe for them to use.

b) Inconsistencies

NG highlighted the concerns that had been raised about using the hoverport¹:

“Concern was also expressed about the potential for locating a compound in the former hoverport site given the presence of rare invertebrates and orchids, leading to the compound location being altered.”

Subsequent plans in November 2024 showed the compound being removed from the hoverport completely, presumably because of the presence of rare invertebrates and orchids, but the order limits shown in the plans included the area previously allocated for the compound. The order limits in Change 1 include most of the apron including the area that had previously been allocated as a compound.

NG state in a document issued in September 2025² that:

“Habitat adjacent to the existing track on the former hoverport site is also suitable for reptiles. This area was included within the Order Limits too late to be included in reptile survey, but since the former hoverport will only be used for operational monitoring and maintenance access no civil engineering highway works are planned; rather the existing track and hardstanding areas will be used.”

Two things stand out from this statement.

Firstly, looking at the timeline, at some time between October 2023 and July 2024 NG made the decision to use the hoverport site for *“construction, maintenance as well as a construction compound”*. Why was this decision made without a full environmental survey, including a reptile survey, undertaken. It is not acceptable to say that they didn’t have time. They had between 15 and 24 months to carry out the survey.

¹ APP-062 – 2.3.4

² AS-093 – 2.7.47

The hoverport apron is not very big (about 0.05km²) so noisy vehicles could have a very detrimental effect on the habitat³:

“Some construction or decommissioning-period impacts from within the Order Limits can affect receptors a small distance beyond the Order Limits, notably noise (which could affect receptors up to 200 m from the source or beyond), and dust (which according to Institute of Air Quality Management (IAQM) guidance (Institute of Air Quality Management, 2024) can significantly affect receptors up to 50 m from the source)”.

Secondly, the statement by NG is saying unequivocally that the hoverport will **“only be used for operational monitoring and maintenance access”**. (My emphasis). Anyone reading this would be in no doubt that the hoverport was not going to be used for construction.

However, the statement is at best misleading as it completely contradicts references made concerning the use of the hoverport for access to the intertidal area for construction vehicles within the **“Description of the Proposed Project”**⁴ (which is in its third iteration also dated September 2025) which clearly states:

“The equipment would include up to four small excavators (15-20 t), two tractors, hovercraft and ancillary equipment such as drilling pipes, pumps and generators. As the exits are in the upper intertidal area, access would be via the corridor from the former hoverport rather than transportation by sea at the top of the tide.”

NG go into more detail about the equipment that would use the hoverport as an access point for the construction of the exit pits in the intertidal area. **Application Document 6.3.1.4.B Appendix 1.4.B Construction Plant Schedule (APP-090)** presents the reasonable 'worst-case' noise and vibration levels from construction plant.”

Within the heading “Cable and conductor works (including trenchless installation, trenching, ducting and cable/conductor installation)” the “worst-case noise and vibration” list⁵ (APP-090) includes:

“one excavator Hyundai HX300 (30 t excavator), one Medium excavator JCB 13 Tonne Excavator and Small excavator 5 t excavator and one Tractor Trailer 9R 440 356 kW engine power”.

This list does not match the list given in AS-093 and this shows yet another example of contradictory evidence presented by NG.

Since NG indicate that *“the noisiest equipment during these activities is expected to be the excavators”*⁶ it seems very remiss of NG not to include any reference to 15-20t excavators and their associated noise levels within APP-090.

Hovercraft are not known for being quiet but they do not feature on the list either. The noise levels for pumps and generators are given in AS-093 but do not appear in APP-090.

³ APP-062 – 2.6.4

⁴ AS-093 – 4.6.165

⁵ APP-090

⁶ AS-093 – 4.6.165

At the exit pits in Pegwell, NG state that⁷:

“Ground conditions indicate 6 m of sediments overlying chalk at exit, so vibropiles would be used if piling is deemed necessary. This assessment has assumed 9 m piles founded to 6 m depth below ground level. Based on previous works, it is anticipated that 4 days is required to install a coffer around a single HDD exit, so up to 16 days of piling for installing on all four exits.”

In the latest set of documents (AS-113), NG reiterate the likely use of cofferdams involving piling, but APP-090 does not include any mention of piling plant. BS 5228-1 Table C.3 #8 gives an indicative value for a vibratory piling rig of 88 L_{Aeq} dB at 10m and a weight of 44t. Why was no piling plant included in AS-090?

NG produced noise contours that showed in Figure 5⁸ the 60dB average L_{max} contours. However, the an agreement⁹ had been reached on using a different measure:

“The 60 dB L_{Amax} threshold has been agreed with Natural England as the zone in which disturbance may arise as a general rule”.

60dB average L_{max} is not a suitable metric to use when one is considering avoiding disturbance to birds and its use by NG is unacceptable.

It is also worth noting that no 60 dB contours (average or max) were shown at either the hoverport site or the exit pits despite the use of noisy excavators (up to 4) and a vibratory piling rig. According to BS 5228-1 Table C3 the excavators and vibratory piling rigs listed have L_{Aeq} max values well above 60dB (81dB and 88dB respectively at 10m) so appropriate 60db L_{max} contours should be shown at the hoverport and at the exit pits.

NG have made contradictory statements. They say that the hoverport will only be used for operational monitoring and maintenance access as justification for not doing a full environmental survey of the hoverport but in other documentation they go into detail, albeit incomplete, giving a list of the vehicles that will used for construction. This is not acceptable.

Clearly, document APP-090 does not accurately reflect the “worst-case noise and vibration levels for construction” and should be amended accordingly.

Since the exit pits are in intertidal region, the construction plant will have to move to and from the hoverport apron twice a day (4 journeys) with the inherent disturbance to the rare invertebrates and presenting a health and safety risk to the general public.

Figure 5 should be amended to show 60dB L_{max} contours for the whole of the Kent site including the hoverport and exit pits.

2) Serious risk of pollution

a) from using the hoverport apron

A press article from the **East Kent Times 25th April 1969**, reports on a presentation given by the National Coal Board (NCB) and Cementation who constructed the hoverport site. The article says that “300,000

⁷ AS-093 – 4.6.167

⁸ AS-007

⁹ PDA-022 – 2.9.75

tons of NCB colliery spoil heap shale” was used as the base for the construction. This was then covered by concrete slabs.

Unfortunately, NG have not undertaken any environmental assessment of the hoverport itself to ascertain the composition of the colliery spoil beneath the concrete but typically it is likely to contain heavy metals including Arsenic, Lead and Copper. **(enzygo – Coal fields – from black legacies to green futures).**

The concrete slabs covering the colliery spoil have, over time, begun to break up with vegetation pushing up through cracks in the concrete over a significant section of the apron. The break-up of the concrete exposes the spoil to water ingress with the possibility of subsequent leaching of heavy metals into the intertidal area including Arsenic, Lead and Copper.

If permission were granted to allow use of the hoverport for construction, the heavy plant such as the four excavators (15 to 20t) and the vibratory piling rig (44t), the risk of further break-up of the apron will increase significantly. Each tracked vehicle will need to return to the hoverport as the tide rises so each vehicle will potentially have to make four journeys across the apron each day for 16 days.

Any polluted runoff will impact the saltmarsh and also be a potential risk to benthic organisms found within the SSSI. The huge environmental risks posed by heavy metals in coastal areas are explained in detail in a study released in January 2025 entitled **“Heavy Metal Pollution in Coastal Environments: Ecological Implications and Management Strategies: A Review”** by Mahmoud El-Sharkawy, Modhi O. Alotaibi, Jian Li, Daolin Du and Esawy Mahmoud. This is a very extensive study but key points that are relevant to this situation:

“Heavy metal pollution demonstrates serious risks to coastal biota, including fish, shellfish, algae, and marine mammals through mechanisms such as bioaccumulation and biomagnification. These processes lead to biodiversity loss, habitat degradation, and reduced ecosystem functionality.

Bioaccumulation is the process by which heavy metals accumulate in the tissues of living organisms, including plants, animals, and microorganisms, through uptake from the surrounding environment. Those heavy metals can undergo biomagnification along the aquatic food chain, whereby predators at higher trophic levels, including fish and birds, accumulate higher concentrations of heavy metals than their prey, posing risks to ecosystem health and human consumption.

Benthic organisms, such as bivalves, polychaetes, and amphipods, are especially vulnerable to heavy metal contamination because of their close association with sedimentary habitats. Exposure to elevated concentrations of heavy metals in sediments can result in chronic and severe toxicity to these organisms, affecting their growth, survival, and reproductive success.

Birds that feed on benthic organisms or fish from heavy metal-contaminated wetlands may experience reduced reproductive success, impaired development, and increased mortality due to metal toxicity.”

It is my belief that allowing the use of the hoverport site risks contravening The Environmental Damage (Prevention and Remediation) (England) Regulations 2015 Schedule 1 which apply to the Pegwell SSSI. It will cause irreparable damage to the complex ecosystem. What is the point of assigning a habitat protected status if a developer can gain permission to cause such harm to that environment? I urge the Ex A to reject the use of the hoverport.

b) from excavation of the exit pits

AS-113 informs us that MMT carried out a survey in 2022 for NG and as part of that survey they took 32 grab samples which were then analysed. Although no accurate details of where these grab samples were taken seem to be available for inspection, one site, S036 is described as being 5km southeast of the port of Ramsgate which could put it close to the SSSI. This site had the highest concentration of lead and Copper of any of the other sites and exceeded CEFAS (MMO, 2014) AL 1 (cAL1) threshold.

The survey also found that Arsenic was found at all 32 sites in levels exceeding cAL1 which means Arsenic must also have been at high levels at S036.

The Marine Management Organisation carried out a high-level review of current UK action level guidance and within that review they state:

“Suitability for disposal of sediments between cAL1 and cAL2 is determined through expert judgement based on evaluation of a number of lines of evidence including historical information, disposal site characteristics and physical characteristics of the material”.

They go on to recommend that the sediment ecological risk assessment should include lines of evidence and suggest a triad approach:

“Triad-based assessment frameworks require evidence of hazard and exposure (generally based on sediment chemistry, toxicity, benthic community structure, and, perhaps, evidence of bioaccumulation) to designate sediment as toxic or requiring management or control”.

Have NG carried out a tiered evaluation of dredged material found to be between cAL1 and cAL2 at S036? If not, why not?

AS-113 gives details of the excavation of the exit pits giving an area of 200m² excavated to a depth of 2m giving a volume of excavated material of 400m³. The document goes on to describe how this material is to be dealt with:

“The excavated sediment will be deposited within the Order Limits within the area. The mounds of sediment generated will locally alter the morphology of the nearshore seabed and the associated water depth.”

In the **“Heavy Metal Pollution in Coastal Environments: Ecological Implications and Management Strategies: A Review”** by Mahmoud El-Sharkawy et al they found that:

“Sediments serve as sinks for heavy metals in coastal ecosystems, accumulating metals over time through deposition and sedimentation processes”.

Has any detailed survey work been done to ensure that this material does not contain heavy metals or other pollutants? If not, why not?

As described in detail above, heavy metals can cause catastrophic damage to this sensitive and protected habitat and NG appear to be unconcerned about this. I urge the Ex A to refuse permission for NG to use the hoverport (or any other route for that matter) to carry out the construction of exit pits without further detailed studies being undertaken.