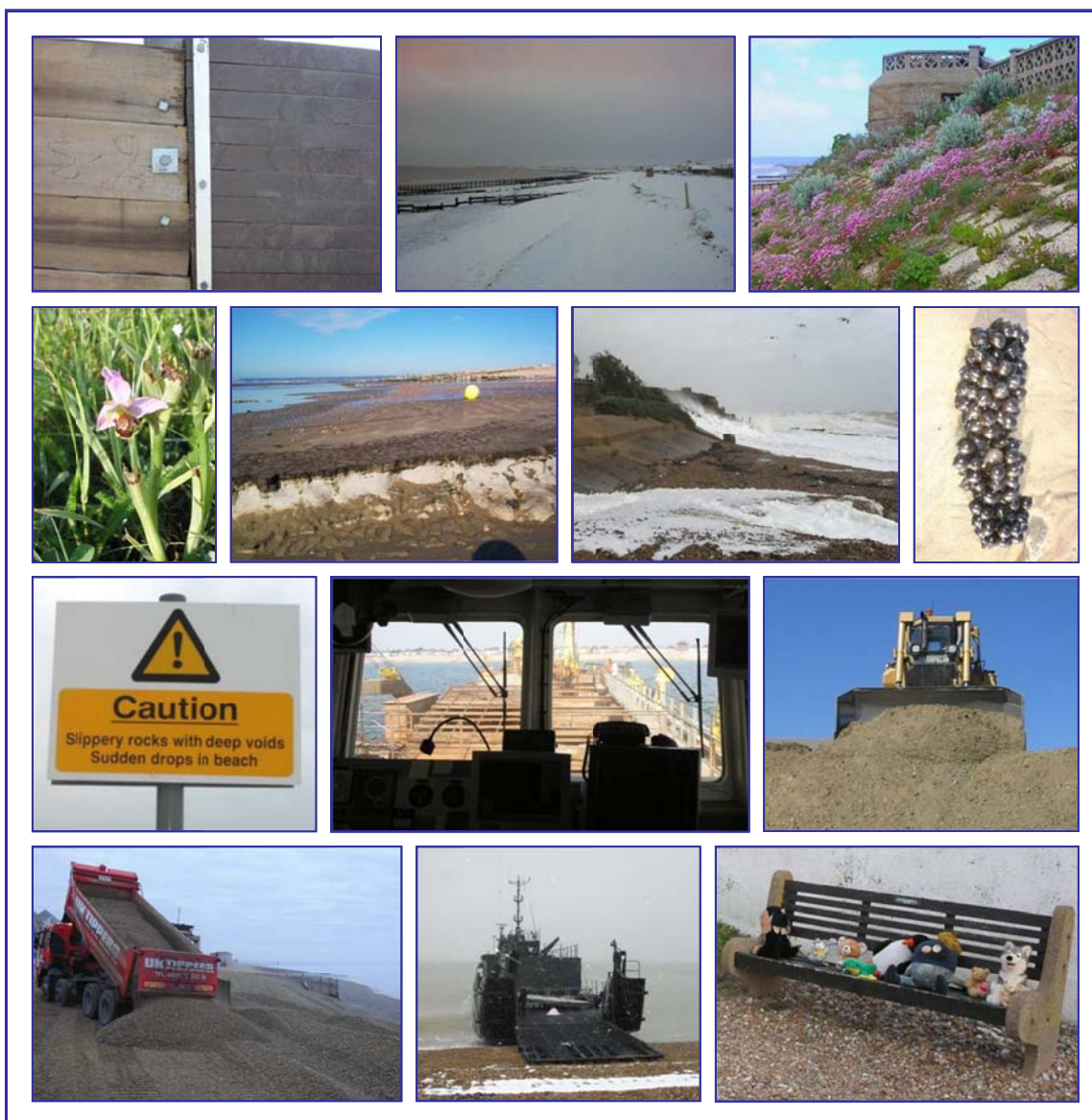


PEVENSEY COASTAL DEFENCE LIMITED



PEVENSEY BAY SEA DEFENCES PPP

MONTHLY REPORT: January 2011





1. Weather

1.1 General Synopsis – Southern England

A rather cold start and end to January, with a much milder interlude around mid-month. The rest of the month was much drier, with high pressure established nearby, but with plenty of cloud throughout. The overall mean temperature was close to the 1971–2000 average, but somewhat below in western areas. Rainfall was over 30% above average in parts of south-east England. Sunshine amounts were close to normal overall. It was sunnier than normal across parts of the west and much of the north but rather dull in the south-east, the third successive month with this contrasting pattern. In more detail the Met Office recorded January as follows;

Detail

Winds

1st to 7th On 1st a weak weather front brought colder air southwards with a few wintry showers. Mainly dry on 2nd, then on 3rd showers spread across the south-west with snow over higher ground. On 4th a band of rain, sleet and snow spread into northern areas, with some showers across the south. After a frosty night in places, on 5th westerly winds brought bands of rain to many areas as temperatures recovered in the south, but wintry precipitation occurred again over northern hills. Further rain fell in many areas on 6th and 7th, with some snow over northern hills for a time on 7th.

Variable
Light

8th to 17th Further bands of rain or showers spread across many parts on 8th and 9th, with frost overnight on both days. Conditions became more unsettled on 10th with periods of heavy rain and strong south-westerly winds. Many areas became dry on 11th with some bright spells, but with further rain later. A band of heavy rain spread across many areas on 12th. Very wet weather continued on 13th and 14th, but it turned drier later on 14th. The 15th saw very heavy rain and strong winds, especially over the north-west, and this rain spread south-eastwards on 16th. It was mild throughout the period 12th to 16th with daytime maxima over 11 °C. Some rain spread across the south on 17th, persisting in the south-east overnight, whilst the north remained drier.

SW
Gales to
Severe Gale
9
becoming
Moderate to
Strong

18th to 23rd Pressure rose on 18th with conditions becoming drier and brighter, but with some sharp overnight frosts. It was similar on 19th, but cloudier in the east with a little rain. This settled weather persisted through 20th but with some cloud and rain in the south and sharp frosts and freezing fog overnight again in western areas. Frost and freezing fog were slow to clear on 21st, whilst high pressure was still close to UK through 22nd and 23rd giving mainly dry, chilly and cloudy weather.

N
Light to
Moderate
occasionally
Strong

24th to 31st The 24th was a cold day with a good deal of cloud and north-westerly winds. Some rain spread southwards later in the day, with further periods of rain on 25th in the northerly flow. The 26th was similar, but with winds turning easterly it became colder, then much colder again on 27th and mainly dry. Temperatures remained low during the day and very cold by night, followed by another cold day on 28th with strong easterly winds and temperatures again staying close to freezing in places. High pressure persisted through 29th and 30th, but the winds eased. Cloudy at times on 29th, but with some brighter periods on 30th, then a sharp frost overnight. Cold and dry at first on 31st, then rain reached the north-west later as westerly winds raised temperatures in the west.

N to NE
Moderate
occasionally
Strong to
NE
Gale force 8



1.2 Gales

Although not the windiest January to date, the first month of 2011 proved to be more like a normal winter month, with 70% of wind and waves emanating from the southwest. There were still a sufficient number of days with dominant northerly conditions to ensure that for the fourth consecutive month average wave heights were well below the long term average.

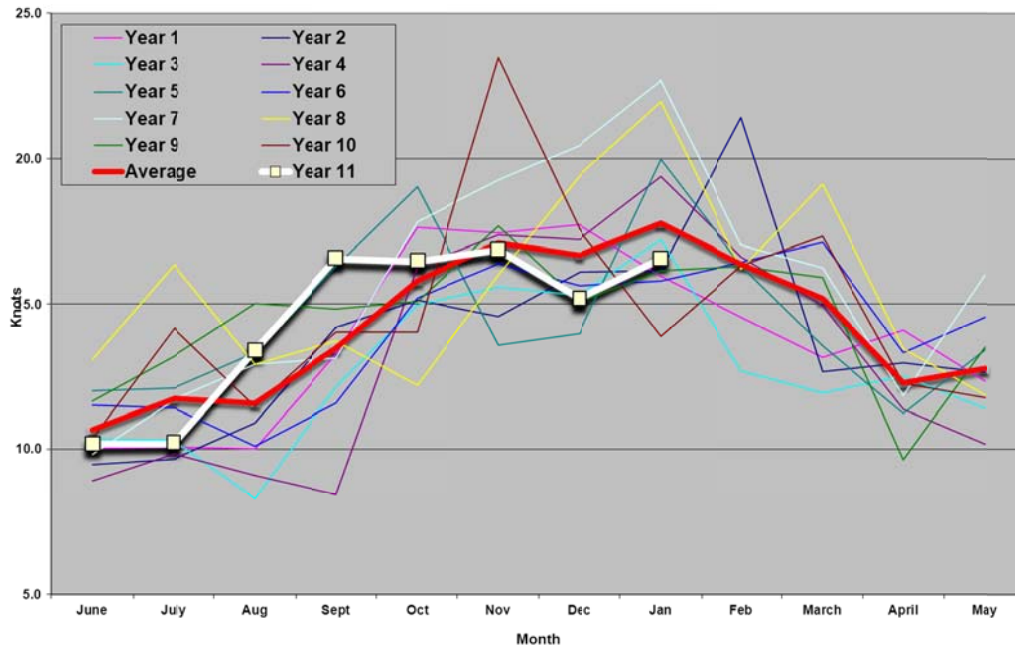


Figure 1: Monthly Average Wind Speeds (from Met Office model)

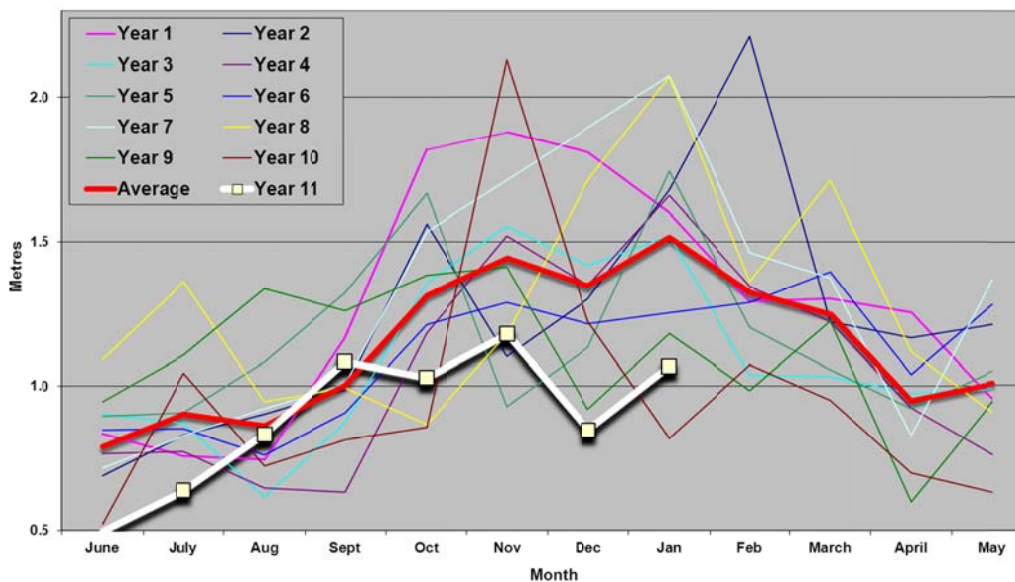


Figure 2: Monthly Average Wave Heights (from Met Office model)



Although eight separate gale warnings were issued for sea area Dover, three were downgraded because of subsequent changes in weather patterns. The main period of wind coincided with the tail end of the first spring tides, but as this was one of the lower sets there was no significant impact on the beach. A day of gale was recorded on 8th January between 04:30 and 07:30, peaking with 37.1 knots at 05:00 so that even the windiest period coincided with low rather than high water. The other point of note was a single gale warranting four “Gale continuing” notifications – the most seen during the contract. All pertinent wind and other forecast information for Pevensey and sea area Dover is recorded in Table 1 below;

Type	Day/Date	Times	Wind Force	Wind Direction
Gale Warning	Tuesday 4 th	17:01	8	S expected later
Gale Warning	Wednesday 5 th	05:30	-	Gale no longer expected
Gale Warning	Wednesday 5 th	21:53	8	SW expected later
Gale Warning	Thursday 6 th	09:49	-	Gale no longer expected
Gale Warning	Friday 7 th	03:34	8	S expected later
Gale Warning		10:08	Severe 9	SW expected later
Gale Warning	Saturday 8 th	03:24	8	SW decreasing soon
Daily		05:00 – 12:00	7 to 8	S to SW
Gale Warning		15:52	-	Gale now ceased
Daily	Monday 10 th	21:00 – 24:00	7	SE
Daily	Tuesday 11 th	00:00 – 07:00	7	SE
Gale Warning		03:14	8	S imminent
Gale Warning		09:51	-	Gale now ceased
Gale Warning	Wednesday 12 th	09:45	8	SW expected soon
Gale Warning	Thursday 13 th	09:45	8	SW continuing
Gale Warning	Friday 14 th	09:47	8	SW continuing
Gale Warning	Saturday 15 th	10:04	8	SW continuing
Gale Warning	Sunday 16 th	10:07	8	SW continuing
Gale Warning		21:50	-	Gale now ceased
Gale Warning	Monday 17 th	08:29	8	SW imminent
Gale Warning		16:21	-	Gale now ceased
Gale Warning	Saturday 22 nd	09:53	8	N expected soon
Gale Warning		21:54	-	Gale no longer expected
Gale Warning	Wednesday 26 th	09:39	8	NE expected soon
Gale Warning	Thursday 26 th	09:45	-	Gale now ceased

Table 1 – Weather Information Received: January 2011

2. Works Undertaken

2.1 Planned Works – Reprofiling

Beach works this month were again confined to reprofiling and use of the box. The bulldozer initially concentrated on 'White Horses' in Sector2 before moving east in the middle of the month. Crest reinstatement was completed at Grey Towers and Beachlands before arriving at Normans Bay East as the month drew to a close.



3. Health, Safety, the Environment & Sustainability

No Health & Safety incidents were reported during the month.

4. Monitoring

4.1 KPF Surveys – GPS Quad Bike Survey

The return of more moderate weather meant a new survey was possible. Favourable conditions, and a 09:20 low water, enabled the whole beach to be surveyed on 25th January over a single tide.

4.2 KPF Surveys – GPS Quad Bike Volumes

Although weather in the preceding eight weeks had been good by winter standards, there had been storms. It was thus something of a surprise to find a further increase of beach volumes. In all the total volume has now grown by 20,000 m³ since October. Even allowing for potential inaccuracies due to the nature of GPS surveys, the beach is in a healthy position. Despite this there are as always some areas of the frontage that require reinforcement.

It is also pertinent to note that a volume very similar to the current surplus sits over and above required beach levels in the final five profiles at Cooden. Whilst this can be used for recycling back to Herbrand Walk, Normans Bay and occasionally beyond, it is equally likely to be lost altogether, driven on to Bexhill by the next set of storms. This pattern has been seen before and doubtless will be again. Volumes from the last five months of survey can be seen in Table 2 below, each of which is the highest since August 2008.

<i>Month</i>	<i>August</i>	<i>September</i>	<i>October</i>	<i>November</i>	<i>January</i>
<i>Above 0 + Stockpile (m³)</i>	2,064,353	2,070,990	2,079,706	2,094,155	2,102,333
<i>Above KPF (m³)</i>	-19,248	-12,611	-3,895	+10,554	+18,731
<i>Above -1.5mOD (m³)</i>	3,004,320	3,004,550	3,014,136	3,022,053	3,043,396
<i>Above -2.0mOD (m³)</i>	3,399,887	3,399,302	3,413,975	3,419,633	3,441,757

Table 2 – Beach Volumes August 2010 to January 2011

4.3 KPF Surveys – Required Actions

Areas requiring work remained familiar, although profile 570 finally gained some of the losses sustained from Sovereign Harbour's revetment, aided by the addition of 4,000 m³ of bypassing material at the end of November.

- 575 'White Horses' remains volatile and despite the majority of work this month being directed there, little improvement was seen. Still 345 m³ too low, recycling is being planned for mid February to address this shortfall.
- 596/597 Adjacent profiles 594 and 595 remain at or close to ideal values, whilst 596 is 1,400 m³ below minimum levels. Profile 597 remains above its base, but 2,000 m³ shy of its normal target. Both these sections will be



beneficiaries of recycled shingle from Normans Bay outfall during February.

- 612 November recycling at Herbrand Walk wall helped add volume, but subsequent storms have removed the majority of this shingle. The current shortfall of 990 m³ will be addressed by February recycling.

4.4 2010 Recharge Mound

Dispersion of the 2010 annual recharge deposition mound continued unabated, but by early January there was still evidence that it had provided good protection to the revetment, as the toe rocks remained well covered. As the two images below illustrate the eight week period saw only minor lowering of the foreshore, whilst erosion to – and behind – groyne GP06 in the centre of each was repaired using bypassing material.



Evolution of the 2010 recharge mound at Sovereign Harbour



5. Stakeholder & Landowner Liaison

After a month of silence from stakeholders and residents alike, January saw a return to more normal contact levels.

5.1 East Sussex County Council

Emma Heywood from ESCC telephoned in her role as support officer for the Local Government Association's (LGA) Coastal Issues Special Interest Group (<http://www.coastalsig.lga.gov.uk>). This group's principal aim is to establish improved governance, management and community well-being to ensure that the UK has the best managed coast in Europe, and to identify appropriate and sustainable funding strategies to support this aim. Its Chairman is currently ESCC Councillor Roger Thomas, and Lead Officer Rupert Clubb, ESCC's Director of Transport & Environment.

Emma reported that the County Council has been awarded more than €200,000 to look at management of nature conservation sites near ports in the county as part of 'SuPorts' (Sustainable management for European local Ports). It is a three year project involving ten partners in seven European countries. The project aims to develop a better understanding of the impact of ports on the immediate marine and coastal environment and so help small ports to be environmentally friendly. As Sovereign Harbour adjoins the Pevensey frontage it was a courtesy call to record that more details would be issued in due course.

5.2 Sussex Police



PC David Love of Sussex Police's Counter Terrorism Intelligence Unit (CTIU) called in at the Salt Haven office to pass on information on the force's operation 'Project Kraken'. It is a national police, maritime crime and counter terrorism initiative to protect the waters of the UK. It replaces Marinewatch and is designed to provide a hostile environment to terrorism, organised crime, human or drugs trafficking and the theft of boats and marine equipment. The recent raising of warning levels for some transport hub areas to SEVERE highlights the need for everyone to remain vigilant, particularly in crowded public areas. Terrorists and criminals potentially conduct practice runs before carrying out their acts so the public is being asked to remain vigilant and report anything suspicious on the water or on the coast.

The name Kraken comes from legendary sea monsters of gargantuan size, said to have dwelt off the coasts of Norway and Iceland. In modern German, Krake means octopus.

5.3 Greg Barker MP

Greg Barker wrote to PCDL during January to record Defra's response to PCDL's letter forwarded by Mr Barker in December. A copy is reproduced below:



Nobel House
17 Smith Square
London SW1P 3JR

Telephone 08459 335577
Email helpline@defra.gsi.gov.uk
Website www.defra.gov.uk



Gregory Barker MP
House of Commons
London
SW1A 0AA

Your ref: GB/LP/5787
Our ref: MC207975/UR

22 December 2010

From Richard Benyon MP
Minister for Natural Environment and Fisheries

Dear Gregory,

Thank you for your letter of 17 November to the Secretary of State enclosing a copy of one from Pevensey Coastal Defence Limited about coastal erosion management. I am replying as the Minister responsible for this policy area, and apologise for the delay in doing so.

Thank you for your comments about more cost effective means of managing erosion. I am keen to encourage greater innovation in flood and coastal erosion risk management, and it is increasingly more important to find alternative solutions that may be more cost effective or more in line with the needs of local communities.

I am keen to look at the ways we can reduce barriers to innovation and encourage innovative projects such as this, and will share your comments with the Environment Agency for it to consider.

Richard Benyon

RICHARD BENYON MP

*agreed by the minister
and signed in his absence*





5.4 Residents

A lady from 'The Beachings', a small development of six bungalows immediately landward of 'The Sandcastle' telephoned on 6th January to query a "low density noise" occurring in her area the previous afternoon and evening. As no machines had been working that day, PCDL were unable to offer any explanation as to where the sound may be coming from and suggested contacting Wealden DC's environmental health department.

Mrs Carew, from 220 Coast Road, visited the office to enquire about the future use of wind turbines and tidal power in the Bay.

David Hood, owner of the property immediately adjoining the Salt Haven depot to the east also visited and took some old groyne timber for use in his garden.

Gordon Chater, from 'Fairway', Norman Road, Pevensey Bay telephoned to report a piece of old groyne timber protruding at 45° from the sand seaward of the groynes to the east of 'The Sandcastle'. On inspection it looked as though a fall in sand levels had exposed timber that had been there for some time. It was pushed off the beach by the bulldozer as it passed two days later on 26th January.

Jan Weeks telephoned on behalf of a number of Sovereign Harbour residents when offices started appearing on the vacant development site behind the southwest beach. Residents were concerned that building work was about to start, so were relieved to learn that they were to do with beach replenishment works for Eastbourne Borough Council.

6. Meetings & Other Liaison

6.1 Environment Agency

6.1.1 Environment Agency – Project Managers

PCDL and Agency project managers met on several occasions during the month to view and discuss on-going matters of interest. A record of issues discussed has been included as Appendix B of this report.

6.2 British Consulate, Naples, Italy

Ines Montella, a Trade and Investment Officer from the British Consul's office in Naples, telephoned PCDL immediately after Christmas. The Consulate has been in contact with Professor Edoardo Benassai of Federico II University in Naples, who is in the process of organising a workshop on coastal erosion. One of the core issues he hopes to explore is the potential for an agreement between a private company and the local public administration along the lines of the Pevensey PPP scheme. It is anticipated the event will take place in Gaeta (Lazio Region) during the Gaeta Yacht Med Festival (www.yachtmedfestival.com) which is in mid April 2011.

Considering that Pevensey Bay Sea Defence scheme is the first sea defence project in the world to be funded as a Public Private Partnership, Prof. Benassai has told the Napoli Consulate that he would like to invite PCDL to talk about the Pevensey experience. The subject is particularly relevant in Gaeta as this particular coastline shows similar erosion characteristic to those found at Pevensey.



Ms Montella subsequently visited the London Boatshow, leading a delegation of Italian businessmen, so it was possible to meet up on 12th January and discuss what PCDL may be able to offer by way of presentations and information on the Pevensey scheme. Upon her return to Naples, Ms Montella confirmed Professor Benassai's interest and said he would be contacting PCDL directly to further any PCDL involvement.

6.3 Hideaways

Director of Hideaways, Henry White, contacted PCDL with regard to old groyne timber. The company (www.hide-aways.co.uk) specialises in building individually tailored play frames, tree houses and garden structures, provides hard landscaping and sells a range of unique hand crafted indoor and outdoor furniture, garden artefacts and reclaimed timber. Based in Salisbury they primarily operate from Cornwall to Oxfordshire. Having learnt that PCDL has derelict groyne material available, Mr White is keen to visit and see if it could be of use.

6.4 Brighton & Hove Wood Recycling Project

The arrival of slightly less colder weather brought the first visit for some months by Christian Bernard and two associates from the Project. They collected 10 cu.yds of timber from East Stream depot for use in their Brighton outlets.

7. Media Contact

7.1 Eastbourne Rotary Club

As well as being Chair of Sovereign Harbour Residents Association, Jan Weeks is also involved in the local Rotary Club. In response to an approach from Mrs Weeks, PCDL has agreed to make a presentation to the Club on 20th September 2011.

8. Short Term Programme

The beach remains in good condition, so reprofiling continues as a daily event. With some of the highest tides of the year approaching in the third week of February, it is expected that a small recycling programme will be undertaken to reinforce the few areas that require bolstering. Machines will be started prior to the highest tides so they are available should they be accompanied by stormy weather.



RECORD OF PEOPLE ENTERING SITE

Attachment	No. of visits to site
PCDL Project Manager	20
Agency Project Manager	1
Environment Agency Staff	8
Westminster Dredging	12
Dean & Dyball/Balfour Beatty	1
Mackley Construction	3
Mouchel	0
Sub-contractors	16
Local Residents/Landowners	7
Other Third Parties	8
Universities/Colleges	0
Total visits	76

- ❖ A single site visit includes any work-related visit or meeting attendance at the PCDL site offices or on the beach.
- ❖ A full working day (e.g. by the PCDL Project Manager) equates to one visit to site. No more than one visit per day per person is recorded.
- ❖ Attendance at a ½ hr meeting by 10 people counts as 10 visits to site.



APPENDIX A: ENVIRONMENTAL INSPECTION CHECKLIST

DATE: 1st February 2011

CONDUCTED BY: Ian Thomas

PERIOD COVERED: January 2011

Number	Item	Yes/ No	Corrective Action Required?	Comments
1	HEALTH & SAFETY			
1.1	Is there any shingle cliffing making public access to and from the beach dangerous?	No		
1.2	Are there any loose, sharp or protruding parts of groyne that are a potential hazard to the public?	No		
1.3	Have any voids in shingle opened up over the Sovereign Harbour revetment?	No		
1.4	If yes, how were they made safe?			
2	NOISE AND VIBRATION			
2.1	Has pile driving been used on site?	No		
2.2	Are compressors acoustically silenced?	Yes		
2.3	Is equipment powered by mains electricity?	No		
2.4	Is all mobile plant fitted with exhaust silencers?	Yes		
2.5	Are reversing alarms set to the minimum safe level?	Yes		
2.6	Have there been any complaints about noise or vibration?	No		
3	AIR POLLUTION AND DUST			
3.1	Is all plant machinery correctly adjusted and maintained with respect to emissions?	Yes		
3.2	Is there visual evidence of dust on roads around the site?	No		
3.3	Is there visual evidence of wind-blown dust in the vicinity of properties around the site?	No		
3.4	Have there been any complaints about dust?	No		



Number	Item	Yes/ No	Corrective Action Required?	Comments
4.	HAZARDOUS MATERIALS			
4.1	Have any known or suspected explosive materials been found on site?	No		
5.	WATER POLLUTION AND LIQUID WASTE DISPOSAL			
5.1	Have shingle recharge methods been discussed with the Fisheries Liaison Officer.	Yes		
5.2	Are materials, vehicles or equipment stored within 3m of the beach crest?	No		
5.3	Are all fuel and oil tanks adequately bunded?	Yes		
5.4	Is there any evidence of spills or leaks which have not been reported?	No		
5.5	Has the Contractor prepared and maintained a spill management plan?	Yes		
6.	SOLID WASTE DISPOSAL			
6.1	Is there an adequate supply of litter and waste receptacles, are they labelled and are they being emptied sufficiently frequently	N/A		
6.2	Is all waste being treated in accordance to the Duty of Care regulations?	Yes		
7.	NATURE CONSERVATION			
7.1	Are areas of vegetated shingle being marked off prior to works and staff briefed?	N/A		
7.2	Are access points clearly marked and respected?	Yes		
7.3	Is there any evidence of damage to established shingle vegetation and the saline lagoons?	No		
8.	ARCHAEOLOGY and HISTORIC MONUMENTS			
8.1	Have there been any archaeological finds?	No		
8.2	If there have been any archaeological finds, was the Contractor's Environmental Manager informed, and was work stopped in that area pending investigation?	N/A		
8.3	Has Tower No 55 at NBW sustained any damage?	No		Currently being renovated



Number	Item	Yes/ No	Corrective Action Required?	Comments
9.	TRANSPORTATION			
9.1	Is transport of construction materials being carried out in accordance with the Contractor's Method Statement?	Yes		
9.2	Have any complaints been received relating to construction traffic?	No		
10.	COMMUNITY LIAISON			
10.1	Have notices been issued to statutory bodies and the public covering the present phase of works?	Yes		
10.2	Is the log book of complaints received and action taken up to date?	Yes		
11.	EMERGENCY INCIDENTS			
11.1	Have there been any emergency incidents?	No		
11.2	If there were any emergency incidents, were the correct procedures followed?	N/A		
11.3	Are emergency planning and training procedures in place?	Yes		
12	ADDITIONAL COMMENTS/CONCERNS			


Pevensey Bay Sea Defences
Notes from Monthly Project Manager's Meeting

January 2010

Items	Comment	Action
H&S Moment & Issues	No H&S or environment issues were raised	
Environment & Sustainability	PCDL Sustainability Action Plan awaiting internal workshop to finalise. Copy to be provided to Agency once finalised	PCDL
Inspection & Current Condition of Defences	No areas of concern were identified. Works repairing storm damage were initiated in a timely manner and in an agreed order.	
Work Done This Month	Reprofiling all month.	
Programme For Next Month	Reprofiling and recycling when necessary in response to any weather events occurring	
Medium Term Planning	Nothing specific planned. Eastbourne recharge and recycling contract, won by PCDL, started this month.	
Enquiries from the Public	No response yet from Martin Davies (Legal) on resident query re cracks to walls at NBE	Agency
Media Contact	Letter received from Greg Barker MP including response from Defra.	
Contractual Issues	Delivery of ABMS information still outstanding.	Agency
	10 year review of sea level rise by HR Wallingford ordered by Agency	Agency
Emergency Response	High spring tides 18-23 rd February. Maintain watching brief.	
Other Related EA Projects	<u>Pevensey Outfalls</u> Delayed	
	<u>L.A. frontages</u> No change	
Any Other Business	No other business was raised	
Next Meeting	Monday 14 th February	

