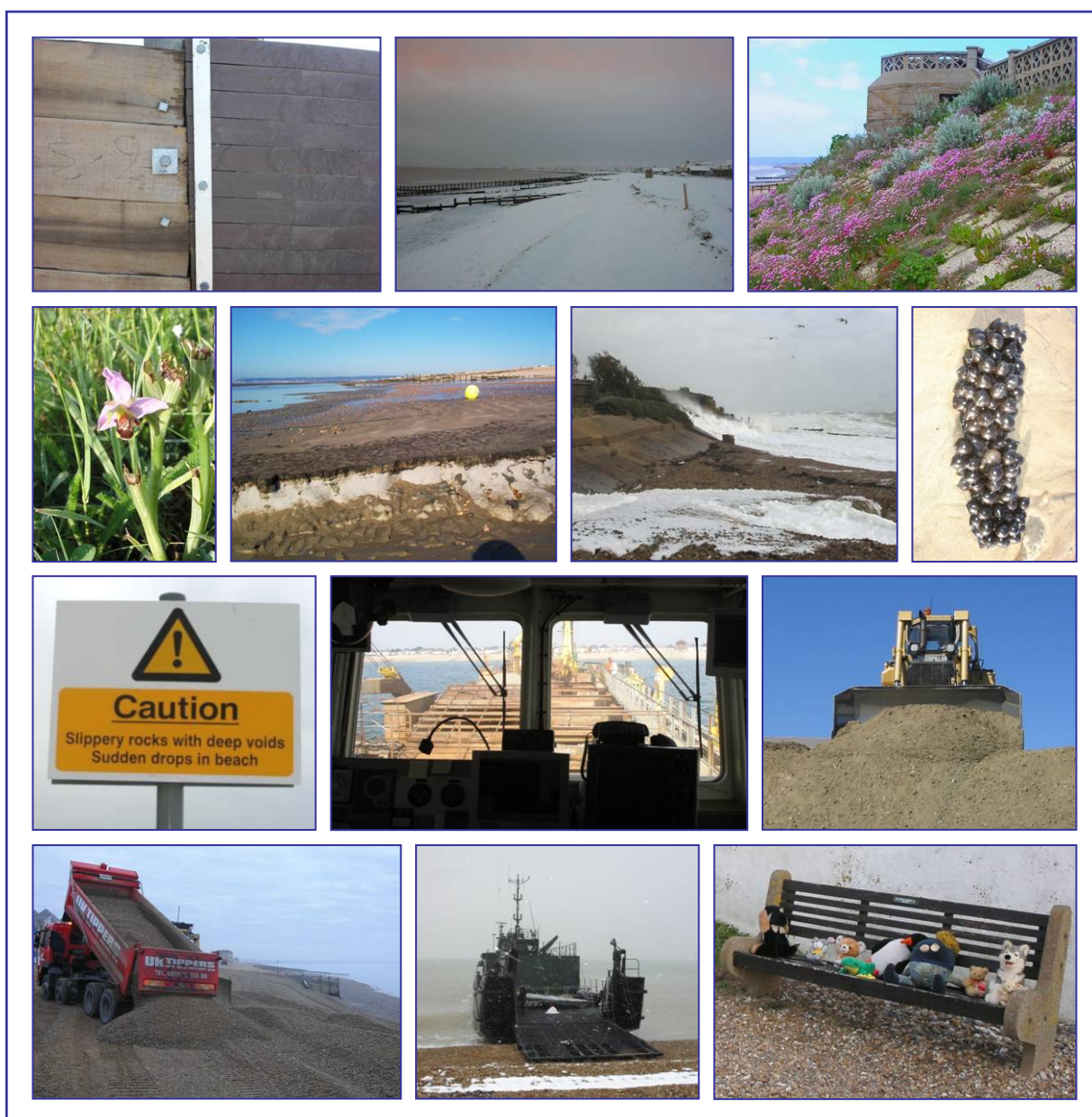




## PEVENSEY BAY SEA DEFENCES PPP

### MONTHLY REPORT: August 2010





## 1. Weather

### 1.1 General Synopsis – Southern England

With low pressure over or near the UK for most of August it was characterised by cloudy and rather cool weather with showers or longer spells of rain at times. As a consequence, it was the coolest August since 1993 even though mean temperatures were only somewhat below the 1971–2000 average. There were very few warm days, and over England and Wales the mean daytime maxima were about 1°C below normal. Rainfall was well above normal over much of the south and east of England, making it the equal third wettest August in the last 100 years, although similar to those in 2004 and 2006. Over twice the normal amount fell over East Anglia and east Kent. Sunshine totals were generally below normal, particularly over south-east England. Here it was the fourth-dullest August in a series from 1929, although August 2008 was even duller. In more detail the Met Office recorded August as follows;

Detail	Winds
<b>1<sup>st</sup> to 4<sup>th</sup></b> Generally settled at first, with just a few showers and temperatures close to or above normal. Rain moved in from the west later on 3rd. On 4th heavy rain spread south-eastwards, with thunderstorms in the south-east during the afternoon causing localised flooding in Sussex.	SW to NW Variable occasionally Strong
<b>5<sup>th</sup> to 11<sup>th</sup></b> A mainly changeable period with showers or bands of rain moving eastwards, but some drier brighter interludes. Temperatures were close to or just above normal in the south and east, reaching around 24 °C in the London area on 8th and in many eastern areas on 9 <sup>th</sup>	NW to SW Moderate occasionally Strong
<b>12<sup>th</sup> to 14<sup>th</sup></b> An area of low pressure became slow-moving in the North Sea during 12th. This led to some heavy thunderstorms in the north-west. Thunder activity then transferred to eastern England on 13th and 14th.	SW to W Moderate to Light
<b>15<sup>th</sup> to 19<sup>th</sup></b> A rather changeable period with spells of rain or heavy showers, and some thunderstorms, but sunnier periods as well.	N to NE to <b>Gale force 8</b> then SW
<b>20<sup>th</sup> to 22<sup>nd</sup></b> An area of low pressure moved north-eastwards on 20th, causing some significant rainfall in the west, where it was also windy. Temperatures reached around 24 °C in the more settled eastern areas. On 21st, there were mild but cloudy and drizzly conditions in the south-west, clearing on 22nd to give fine weather with a few showers.	SW Light to Moderate
<b>23<sup>rd</sup> to 27<sup>th</sup></b> A large area of heavy rain moved through southern and central areas during the early hours of 23rd, with around 25 mm widely and 42 mm at Thorney Island (Hampshire). The 24th was a showery and windy day. On 25th a further area of persistent rain moved across the south giving over 20 mm widely. More heavy rain arrived in the far south by the end of 25th. The 26th was an unusually cool August day. Persistent rain eventually cleared the south-east later on 27th, with more settled conditions spreading in from the north-west.	SW Strong to <b>Severe Gale 9</b> becoming NE Moderate
<b>28<sup>th</sup> to 31<sup>st</sup></b> An area of high pressure started to build in from the south-west, creating largely settled conditions. Strong northerly winds brought heavy showers on 29th, but by Bank Holiday Monday most areas were dry, warm & sunny. High pressure became well established by 31st.	NW Moderate to Strong and <b>Gale force 8</b>



**1.2 Gales**

Although far from genuinely windy, there was an increase in wind speed during August, so much so that it was the second windiest August since 2000. In all four periods of gale were forecast – two from the north and two from the southwest – and for second summer month in a row warnings at sea were for severe force 9. Despite several days of gale warning, on-land speeds just failed to reach gale force, the peak reading for the Salt Haven anemometer falling 0.2 knots short at 33.8 knots at 05:15 on 23<sup>rd</sup> August.

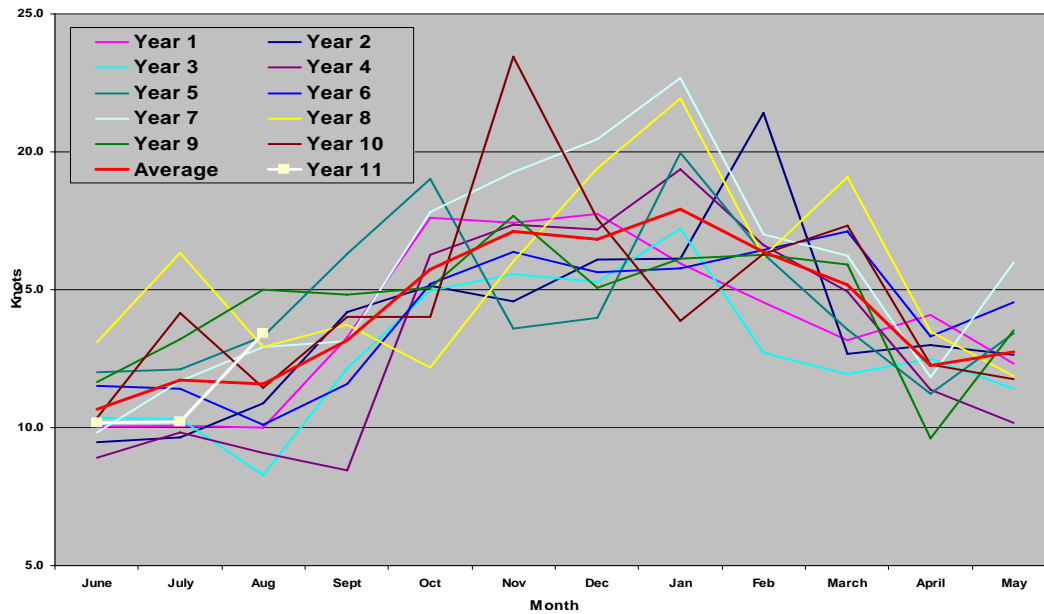


Figure 1: Monthly Average Wind Speeds (from Met Office model)

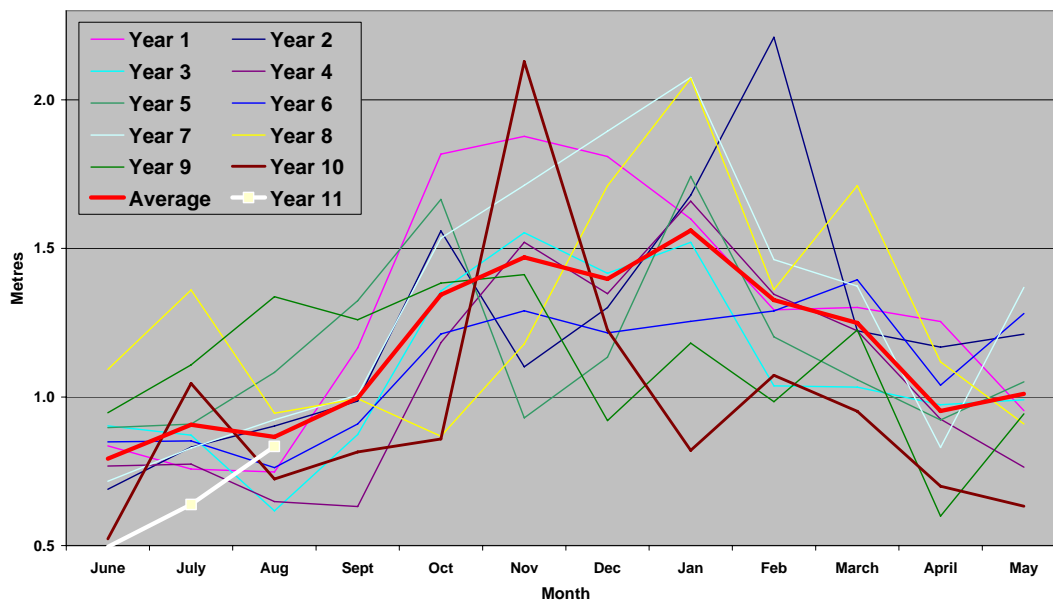


Figure 2: Monthly Average Wave Heights (from Met Office model)



Hygrometry & Telemetry Officer, Mike Swallow, reported that the Salt Haven anemometer has been recording values since mid July, although the early readings had not been calibrated. Therefore it was agreed to only use values from 1<sup>st</sup> August.

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	Sunday 15 <sup>th</sup>	09:55	8	N expected soon
Gale Warning	Monday 16 <sup>th</sup>	03:39	8	NW now backed
Gale Warning		15:43	-	Gale now ceased
Gale Warning	Sunday 22 <sup>nd</sup>	03:37	8	SW expected later
Gale Warning		15:48	8	SW expected soon
Gale Warning			<b>Severe 9</b>	SW increasing later
Gale Warning		21:43	<b>Severe 9</b>	SW expected soon
Daily	Monday 23 <sup>rd</sup>	06:00 – 12:00	7	S to SW
Gale Warning		09:57	8	SW decreasing soon
Daily		17:00 – 18:00	7	SW
Gale Warning	Tuesday 24 <sup>th</sup>	10:02	8	SW continuing
Daily		13:00 – 19:00	7	SW
Gale Warning		03:30	-	Gale now ceased
Gale Warning	Wednesday 25 <sup>th</sup>	09:18	8	SW expected later
Daily		23:00 – 24:00	7	SSW
Gale Warning	Thursday 26 <sup>th</sup>	09:44	-	Gale now ceased
Gale Warning	Sunday 29 <sup>th</sup>	08:46	8	NW imminent
Gale Warning	Monday 30 <sup>th</sup>	09:27	-	Gale now ceased

*Table 1 – Weather Information Received: August 2010*

## 2. Works Undertaken

### 2.1 Annual Beach Replenishment

By early August it was apparent that – all things being equal – work on the 2010 annual beach renourishment would start before the end of the month. Consequently on 9<sup>th</sup> August it was agreed with the incumbent Fisheries Liaison Officer (FLO) and local resident, Graham Doswell, that we would try to arrange a fisheries liaison meeting as soon as possible. Since Harm Bos, a regular project manager for Westminster Dredging (WDCo), was available a meeting was successfully arranged for 12<sup>th</sup> August. Since the Agency had again agreed to link Bulverhythe and Seaford with the Pevensey campaign, Andy Manville represented the Agency at the meeting, whilst unfortunately the local Marine Management Organisation (MMO) were again unable to provide an attendee. Because the 2010 recharge was to be the twelfth of the contract, with no problems arising from any of the previous works, the MMO are comfortable with being provided minutes of meeting notes and FLO details.

For all three sites approach routes were agreed to be the same as in 2009, and with all personnel previously involved, final arrangements for provision of FEPA licenses and issuing of Notices to Mariners were achieved with little fuss.

The first delivery was made at Sovereign Harbour on Sunday 29<sup>th</sup> August, so with all but the first couple of loads being in September it is next month's report that full details will be described.



### 3. Health, Safety & Environment

No Health & Safety incidents were reported during the month.

The annual formal review of the project Health & Safety Plan continued, with new documentation to cover site inductions for sub contractors being produced. Additional information showing specific placement for signs during recycling works is also being added. Revisions should be complete by the end of September.

### 4. Monitoring

#### 4.1 KPF Surveys – GPS Quad Bike Survey

A monthly quad bike survey of the whole beach was completed on the mornings of Thursday 12<sup>th</sup> and Friday 13<sup>th</sup> August.

#### 4.2 KPF Surveys – GPS Quad Bike Volumes

Survey results were much as expected and showed variations typical of those seen in normal summer conditions. Losses Above 0.0mOD seen in July were regained, such that the overall volume has changed little since April aside from an apparent rise in May and fall in July. In looking at the standard deviation at the three recorded levels, it is apparent that there is generally more movement around the Above 0.0mOD level than for either -1.5m or -2.0mOD

<i>Month</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>August</i>	<i>Stn Dev.</i>
<i>Above 0 + Stockpile (m<sup>3</sup>)</i>	<b>2,063,838</b>	<b>2,080,513</b>	<b>2,065,172</b>	<b>2,054,090</b>	<b>2,064,353</b>	<b>9,483</b>
<i>Above KPF (m<sup>3</sup>)</i>	-19, 673	-3,088	-18,429	-29,511	-19,248	
<i>Above -1.5mOD (m<sup>3</sup>)</i>	<b>2,997,658</b>	<b>3,008,351</b>	<b>3,003,720</b>	<b>3,008,467</b>	<b>3,004,320</b>	<b>4,416</b>
<i>Above -2.0mOD (m<sup>3</sup>)</i>	<b>3,394,098</b>	<b>3,399,212</b>	<b>3,398,476</b>	<b>3,402,591</b>	<b>3,399,887</b>	<b>3,079</b>

*Table 2 – Beach Volumes April to August 2010*

Once again there was little change compared to June and July quantities, with total volumes for the last three months falling within a 10,000 m<sup>3</sup> span.





#### **4.3 KPF Surveys – Required Actions**

Profiles requiring attention therefore remained largely unchanged too;

- 570 Scour Hole. A fall of 1 m<sup>3</sup> for ABMS 570 to 455 m<sup>3</sup> low, meant that the proposed 15,000 m<sup>3</sup> renourishment remains the likely scenario.
- 596 This section saw similar changes and an increase of 19 m<sup>3</sup> to -212 m<sup>3</sup>, meaning it remains the target of the first phase of recycling in late September or early October.
- 612/614 Herbrand Walk fishing station. Small variations saw the first profile lose 150 m<sup>3</sup> and the second gain 363 m<sup>3</sup>. Both remain just below minimum levels and will similarly be recycling deposition sites in the near future.

#### **5. Stakeholder & Landowner Liaison**

##### **5.1 Residents**

In a quiet month for visitors, Coast Road resident David Lloyd visited the Coast Road compound to collect old groyne timber for use as firewood.

#### **6. Meetings & Other Liaison**

##### **6.1 Environment Agency**

###### **6.1.1 Environment Agency – Project Managers**

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

###### **6.1.2 Environment Agency – Flood Incident Management (FIM)**

On 10<sup>th</sup> August KES Area Manager Andrew Pearce circulated information on Exercise Watermark, a Defra-led project, hosted by the Environment Agency. It is a multi-agency exercise, with the Environment Agency being one of many organisations involved. It has been devised to test all aspects of severe, wide-area flooding, across England and Wales. It will involve a number of related severe weather conditions and will incorporate flooding from the sea, rivers, surface water and reservoirs. It will be a larger scale exercise than any seen in Southern Region before. To ensure that the right people are ready and available to participate, the Agency will be restricting annual and flexi leave for key staff between 28 February and 11 March 2011 for exercise planners, and between 4 March and 11 March 2011 for exercise players. It is unclear how this will affect Pevensey, but it is possible that PCDL may be involved to some degree, particularly as Peter Midgley is leading the Exercise on behalf of the Agency.



## 6.2 Sussex Police

On Thursday 5<sup>th</sup> August Sussex Police telephoned to report there had been a groyne fire on Herbrand Walk at some time on Sunday 1<sup>st</sup> August that had been attended by Sussex Fire & Rescue Service. The call was to establish the level damage sustained so it could be added to the case notes (police reference 1201 for that date). A site visit failed to find any evidence of a damaged groyne despite asking several hut owners on Herbrand Walk, who had been on the beach at the weekend. The police were therefore informed that no evidence of damage had been found, and certainly none of the groynes being retained under the scheme had been affected.

It was a week later when August's monthly photographs were being taken that the site of the incident was found. In fact the damage was to groyne GC03, approximately 100m east of Normans Bay outfall. The area in question is highlighted in the picture below:



*Top: Fire damage to groyne GC03 (circled)*  
*Bottom: Detail of affected area.*

Although four bays of waling, pile heads and top plank were burnt out, it was in an area where groynes are being removed as they fail. The upper image shows that most of the lower section of groyne has already been removed and it was only a matter of time before this section too would have failed and been taken out.



### **6.3 Strategic Regional Coastal Monitoring Programme (SRCMP)**

On Friday 6<sup>th</sup> August a CD ROM was received from SRCMP containing a frontage review for Sediment Sub-cell 4c (Dover to Beachy Head) covering 2003 to 2008. A table summarising beach replenishment recorded that none had been recorded. All material changes due to recycling, replenishment and harbour bypassing have been regularly supplied to the Agency, so it was something of a mystery as to why they were not included. Subsequently, Claire Milburn, a Coastal Process Scientist with the SRCMP at Canterbury City Council contacted PCDL hoping to get recycling records for management unit MU27 (Pevensey Bay) as records they hold end in October 2006. Hannah Gribben has recently moved to a new post within the Agency and her departure from the SRCMP team seems to have resulted in the outstanding information going missing.

The division of management units (MU) within the Sub-cell also appeared a little bizarre. Units start with MU1 (South Foreland to Dover) in the east, and move west to MU30 at Beachy Head. Most of the Pevensey frontage falls within MU27, which starts where the PPP contract ends at terminal groyne GC32, Cooden. However in the east, MU27 gives way to MU28 (Sovereign Harbour) on the political boundary between Wealden DC and Eastbourne BC in the middle of Sector 2. Even worse MU28 also contains the four groyne bays southwest of the harbour, the boundary falling on Langney outfall. These four bays are clearly part of the Eastbourne coastal process area, and as the source for harbour bypassing levels of extraction are critical to understanding how Eastbourne (MU29) behaves. One final twist is that ABMS profiles measured in MU29 run from west to east, whereas in all Units to the east they run east to west. Since littoral drift throughout the Sub-cell is west to east, this suggests that Eastbourne is correctly annotated and all others are back to front.

In order that SRCMP records can be amended, PCDL provided details of all works up to spring 2010 direct to Canterbury City Council.

## **7. Media Contact**

### **7.1 Pevensey Bay Sea Defence PPP – 10 Year Anniversary**

Drafts of a four-page article for New Civil Engineer magazine were circulated by journalist Margo Cole to ensure the accuracy of factual content before its appearance in the magazine's 2<sup>nd</sup> September edition.





## 8. Short Term Programme

Works for Pevensey's annual replenishment has already started, with the total volume delivered expected to be approximately 15,000 m<sup>3</sup>. A similar amount has been ordered for Bulverhythe and Seaford with work there expected to start on completion of the Pevensey campaign. Recycling is likely to commence once replenishment is complete and in response to weather events that may or may not coincide with .

### RECORD OF PEOPLE ENTERING SITE

<b>Attachment</b>	<b>No. of visits to site</b>
PCDL Project Manager	19
Agency Project Manager	3
Environment Agency Staff	11
Westminster Dredging	12
Dean & Dyball/Balfour Beatty	0
Mackley Construction	4
Mouchel	1
Sub-contractors	0
Local Residents/Landowners	6
Other Third Parties	14
Universities/Colleges	0
<b>Total visits</b>	<b>70</b>

- ❖ 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: 1<sup>st</sup> September 2010

CONDUCTED BY: Ian Thomas

PERIOD COVERED: August 2010

Number	Item	Yes/ No	Corrective Action Required?	Comments
<b>1</b>	<b>HEALTH &amp; SAFETY</b>			
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?			
<b>2</b>	<b>NOISE AND VIBRATION</b>			
2.1	Has pile driving been used on site?	No		
2.2	Are compressors acoustically silenced?	N/A		
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		
<b>3</b>	<b>AIR POLLUTION AND DUST</b>			
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
<b>4.</b>	<b>HAZARDOUS MATERIALS</b>			
4.1	Have any known or suspected explosive materials been found on site?	No		
<b>5.</b>	<b>WATER POLLUTION AND LIQUID WASTE DISPOSAL</b>			
5.1	Have shingle recharge methods been discussed with the Fisheries Liaison Officer.	N/A		
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		
<b>6.</b>	<b>SOLID WASTE DISPOSAL</b>			
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		
<b>7.</b>	<b>NATURE CONSERVATION</b>			
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		
<b>8.</b>	<b>ARCHAEOLOGY and HISTORIC MONUMENTS</b>			
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



<b>Number</b>	<b>Item</b>	<b>Yes/ No</b>	<b>Corrective Action Required?</b>	<b>Comments</b>
<b>9.</b>	<b>TRANSPORTATION</b>			
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		
<b>10.</b>	<b>COMMUNITY LIAISON</b>			
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		
<b>11.</b>	<b>EMERGENCY INCIDENTS</b>			
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		
<b>12</b>	<b>ADDITIONAL COMMENTS/CONCERNS</b>			



**PEVENSEY COASTAL DEFENCE LIMITED**  
**Monthly Report – August 2010**



**ACTIVITY LOG**

DATE: 1<sup>st</sup> September 2010

CONDUCTED BY: Ian Thomas

PERIOD COVERED: August 2010

<b>SITE ACTIVITY THIS MONTH</b>		
<i>Operation</i>	<i>Dates</i>	<i>Comments</i>
Annual beach recharge	From 29 <sup>th</sup>	Dredger Sospan Dau delivering sea dredged aggregate to Sovereign Harbour revetment

<b>STAFF</b>			
<i>Name</i>	<i>Company</i>	<i>Date</i>	<i>Training Material Supplied</i>
B. Warman	WDCo.	29-08-10	Site Rules, Plant ID, MS2010
T. Garnell	WDCo.	29-08-10	Site Rules, Plant ID, MS2010



## Pevensey Bay Sea Defences

**Notes from Monthly Project Manager's Meeting**
**August 2010**

Items	Comment	Action
H&S Moment & Issues	No H&S issues reported this month	
Inspection & Current Condition of Defences	No areas of concern were identified.	
Work Done This Month	Annual beach replenishment work at Sovereign Harbour started on Sunday 29 <sup>th</sup> August, expecting to stay about three weeks	
Programme For Next Month	Annual recharge to be completed, quantity expected at 15 - 20,000 m <sup>3</sup> .  Recycling start will depend on arrival of earliest autumnal gales	
Medium Term Planning	Will review likelihood of Bypassing works during September	
Enquiries from the Public	No enquiries were received this month	
Media Contact	Updating of PCDL website complete.	
Contractual Issues	Delivery of ABMS information still outstanding. CCO reported Jon Clarke (CCC) intends to visit, but CCC have not been in contact.  10 year review of sea level rise by HR Wallingford ordered by Agency	Agency
Emergency Response	Tides increasing towards equinox. 8.1m tides due on 10 & 11 <sup>th</sup> September Maintain watching brief.	
Other Related EA Projects	<u>Pevensey Outfalls</u> No change  <u>L.A. frontages</u> No change	
Any Other Business	No other business was raised	
Next Meetings	Date for September meeting yet to be fixed	

