

Marine licensing of beach management activities

1. Beaches in coastal management systems

- 1.1 Beaches can be an integral and sometimes the only part of a natural or man-made coast protection or flood defence feature. A beach often forms part of a continuous system within a longer stretch of coast. Under natural processes, this system functions as a 'transport corridor' and repository for beach material¹ that moves across administrative boundaries, across areas covered by hard structures such as sea walls or groyne fields, and across natural areas.
- 1.2 This transport corridor is referred to as a sediment cell, a more or less closed sedimentation system bounded by geo-morphological features such as large headlands, estuaries or artificial structures like breakwaters. These systems will be 'leaky' to a degree beach material may at some point leave a sediment cell permanently or may be deposited in a natural inlet or harbour channel. Cell boundaries are ascertained through sediment monitoring, and a cell may comprise a number of 'sub-cells' of more defined interconnectivity.
- 1.3 These sub-cells may still be several kilometres long, or they may be very small in extent and grouped together into larger sub-cells for planning or management purposes. Although their landward boundary may change with accretion or erosion, it is usually easily defined. Their seaward extent is variable and may be more difficult to define.
- 1.4 Their management is increasingly holistic in England and Wales with the development of 22 Shoreline Management Plans, the boundaries of which are largely defined by sediment cells and sub-cells. Current schematics divide England and Wales into 11 sediment cells, further sub-divided into approximately 35 sub-cells (Annex 1).

2. Beach management

- 2.1 Beach management activities attempt to counterbalance natural processes by moving beach material within a sediment cell, sub-cell or individual beach, or by adding from a source not connected to the sediment cell.
- 2.2 Beach management activities include:

¹ Beach material is the sediment that forms the beach. This ranges from sand to cobbles or any mixture of grain sizes and can also include shell fragments.

- i. beach re-profiling: the movement of beach material in a cross-shore direction up or down the beach;
- ii. beach recycling: the movement of beach material along the beach from areas of accretion to areas of erosion within the beach or associated sediment system;
- iii. beach replenishment²: the addition of beach material from land-based, off-shore or other coastal sources not connected to the beach or its associated sediment system to replace material permanently lost from the system.
- 2.3 These activities re-establish site-specific volumes and geometries, as determined by the original beach design or from best practice and experience supported by monitoring data pertaining to the dynamics of the beach.
- 2.4 All of these activities may require a marine licence granted by the Marine Management Organisation (MMO) under the Marine and Coastal Access Act 2009 (the 2009 Act), subject to certain exemptions.
- 2.5 This note provides guidance on the licensing requirements for such activities.

3. The need for a licence

- 3.1 The 2009 Act provides that no person may carry on a licensable activity except in accordance with a marine licence. The MMO is the licensing authority within English waters for marine licences.
- 3.2 The list of licensable activities is set out in section 66 of the 2009 Act and includes:
 - the deposit of any substance or object in the sea or on or under the sea bed;
 - the construction, alteration or improvement of any works either in or over the sea or on or under the sea bed;
 - the removal of any substance or object from the sea bed; and
 - the carrying out of any form of dredging.
- 3.3 This means most activities involving the relocation of beach material from or to an area seaward of mean high water springs are licensable under the 2009 Act unless an exemption applies, in order to regulate their impact upon the environment, human health, other users of the sea and other relevant matters. Even where an activity is exempt from a marine licence, there may be other assessments required to monitor such impacts under other legislation.

² 'Replenishment' and 'recharge' are considered inter-changeable terms in this document.

4. Exemptions

4.1 Article 19 of the Marine Licensing (Exempted Activities) Order 2011 provides that a licence is not required for:

"an activity carried on by or on behalf of the Environment Agency for the purpose of maintaining any... coast protection works... drainage works... or... flood defence works."

4.2 This article also provides that a licence is not required for:

"an activity carried on by or on behalf of a coast protection authority... for the purpose of maintaining any coast protection works."

4.3 Both of these exemptions are subject to the condition that:

"the activity is carried on within the existing boundary of the works being maintained."

- 4.4 The order also specifies that neither of these exemptions apply to beach replenishment activities.
- 4.5 The exemptions set out in article 19 may apply to the maintenance of both hard-engineered works, such as sea walls, and soft-engineered works, such as beach management activities.

5. Application of the exemptions to beach management

The person carrying out the activity

- 5.1 In considering whether a beach management activity is exempt, the first step is to consider whether the activity is being carried on by or on behalf of the Environment Agency or a coast protection authority. This is a factual matter that in most cases should be straightforward to determine.
- 5.2 If there is any doubt as to whether a person is operating on behalf of the Environment Agency or a coast protection authority, the MMO may seek the view of the Environment Agency or the relevant coast protection authority.

The purpose of the activity and existing boundary of works

- 5.3 The next step is to consider the purpose of the activity. The exemption applies to the maintenance of coast protection, drainage or flood defence works by the Environment Agency and to the maintenance of coast protection works by a coast protection authority.
- 5.4 The MMO defines 'maintenance' as the upkeep, repair or reasonable improvement of works. Any such activity must not constitute a significant alteration to the works. What is meant by a 'reasonable improvement' or

'significant alteration' is assessed on a case by case basis, but guidelines are provided below.

- 5.5 In the context of beach management, 'maintenance' would usually include the following works where they are in line with previous management activities on that beach:
 - i. re-profiling works where beach material within the beach area is moved up the beach, and
 - ii. recycling works where beach material within the extent of the beach feature is used.
- 5.6 Maintenance may also include recycling works where beach material from the same sediment sub-cell is used, subject to that material being of the same or similar aggregate class³ and origin⁴, being functionally linked to the receiving beach.
- 5.7 For beach management, therefore, the boundaries of works and the purpose of the activity are linked and should be considered together. Managing natural dynamic features such as beaches involves greater consideration of the system as a whole as the boundaries of previous re-profiling or recycling works may change within that system.
- 5.8 The MMO would not usually consider a beach management activity to be 'maintenance' if it involved:
 - i. re-profiling or recycling in an area that has not previously been subject to such activities
 - ii. a material significantly different in aggregate class or origin from the natural material present on the receiving beach
 - iii. a material not functionally linked to the receiving beach
 - iv. material sourced from outside the littoral sub-cell of the receiving beach
 - v. a significantly different quantity of recycled material that is considered by the MMO to substantially alter the dynamic equilibrium of the receiving beach or donor areas.
- 5.7 Additionally, if the activity involved the construction or placement of new groynes or other structures the MMO would not consider this to be maintenance.
- 5.8 In assessment of the above parameters, it is for the person undertaking the activity to determine whether or not the exemption applies on a case-by-case

³ The Wentworth classification provides a framework for aggregate size from boulder to colloid according to the Phi scale. For beach management purposes, material is likely to range from -8 (cobble) to 2 (fine sand), and exempt recycling will aim to maintain the predominant class naturally occurring at the receiving area, acknowledging that material may be mixed and composition dynamic.

⁴ Terriginous or marine, with appropriate consideration of parent lithology, mineral and chemical/biological composition.

basis. The MMO may be able to offer guidance on this point, and advance contact with the MMO is advisable in cases where the exemption may apply. Contact details are provided below.

6. Contact details for further information

For further information on this or other aspect of marine licensing please contact the Marine Licensing Team. Contact details are:

email:	marine.consents@marinemanagement.org.uk
telephone:	0300 123 1032
fax:	0191 376 2681
post:	Marine Licensing Team Marine Management Organisation Lancaster House Newcastle upon Tyne NE4 7YH

For Environment Agency support, please contact the FCRM Strategic Overview Team Senior Coastal Adviser

e-mail: <u>nick.hardiman@environment-agency.gov.uk</u>

telephone: 01767 464 203



Annex 1: Sediment cells and sub-cells in England and Wales

Environment Agency; Licence No. 100026380, 2007