BEST PRACTICE

LOCATION:	**Marine & ship to shore**	**ARTICLE YEAR**	**2006**
ACTIVITY:	**Marine Operations**	**COMPANY:**	**United Marine Aggregates**
SUB ACTIVITY:	**Dredging**	**COMPANY LOCATION:**	**Greenwich Wharf, London**
BEST PRACTICE No:	**BP341**	**COMPANY TEL:**	**020 83050978**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

Handling tramp metal and munitions

ARTICLE

Throughout its history, the marine aggregate industry has had to deal with contaminants. For example, tramp metal and munitions are found on the seabed as a result of illegal dumping, military activity and shipwrecks. During the dredging process, metal and munitions can be dragged up with the sand and gravel and ultimately discharged at a wharf.

UMA has achieved a way of reducing the contact of its staff and assets with these contaminants. The original system had involved using a metal detector to locate the tramp metal / munitions. Whilst this process was reasonably effective, due to the high feed rates and depth of material, some contaminants were able to pass undetected..

To overcome the problem, there had to be changes at the wharf. Whilst it is desirable to remedy the problem at sea, this is not always possible. The two main aims were to improve detection and reduce human intervention. The following was purchased and incorporated into a system:
? Overband magnet
? Electromagnet
? Three static magnets
? Metal detector
? Appropriate galvanized steel structures
? 3 tonne electric driven hoist remotely controlled from the plant control room
? Dome camera colour monitor in control room

There is also a new system detailing how contaminants should be dealt with. The elements include:
? An introduction
? A description of the equipment and how it operates
? Frequency of inspections
? Instructions in dealing with tramp metal / munitions
? A three-stage procedure to underpin the system – from when suspected munitions are detected, through to what to do in the event of onsite detonation by Bomb Disposal officers.
? An evacuation plan when a controlled detonation is required, including contact with emergency services, muster points and communication with surrounding companies,
? Historical / daily records.

Note: Readers are referred to the June 2006 guidance entitled “Dealing with munitions in marine aggregates”, produced by QPA, BMAPA ACPO and the Crown Estate (in conjunction with the MCA, JSEOD and the HSE). This document is freely available on www.safequarry.com (click “Hot Topics”; enter “marine” in keyword search box).

ARTICLE IMAGES

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Electromagnet

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Magnet hoist