

Dredging for a new berth to a depth of -11.0m CD. The dredge area contained a proportion of contaminated material.

## IRISH DREDGING COMPANY LTD SKILLS, RESOURCES AND EXPERIENCE

Irish Dredging is a subsidiary of Royal Boskalis Westminster nv, one of the world's largest dredging groups and with the support of other group subsidiaries Irish Dredging has the capability and resources to undertake the complete spectrum of dredging related tasks including coastal, inland waterway and seabed protection.

## PROJECT DESCRIPTION

The first phase of the works required the dredging of a reception pit, within the site footprint, to -15.0 CD for the disposal of the contaminated material. The backhoe Manu Pekka and split hopper barges Cork Sand and Long Sand were deployed from the Boskalis fleet. Uncontaminated material was transported to the licensed offshore disposal site at Burford Bank in Dublin Bay. Additional vessels were the Dublin Port tug Poolbeg and survey vessel Depthfinder.

The contaminated material was removed with a recently developed Environmental Profiling Grab (EPG) which has an extra wide opening capacity and a horizontal closing action, enabling the removal of thin layers of material, leaving a flat surface following each pass of the grab. The grab also has an enclosed design with venting valves which avoids spillage of contaminated material during removal. In areas which contained obstructions and debris, the use of this grab was not possible, so in these locations a tightly controlled method using the standard 8.5m<sup>3</sup> bucket was adopted until the obstructions were cleared.

The contaminated arisings were placed into the split hopper barges and transported to the reception pit within the site. With the EPG fitted, Manu Pekka was towed to the reception pit, where it grabbed the contaminated material from the hoppers and lowered it in a controlled manner to the sea bed within the reception pit, when the EPG was opened. Approximately 7,000m<sup>3</sup> of contaminated material was placed in the pit, after which it was covered and sealed with a layer of suitable gravel won from elsewhere within the dredging footprint.

The works were completed in 6½ weeks, two weeks ahead of programme.

## FEATURES

Project Name	Berth 50A Development
Client	Port of Dublin
Contractor	Irish Dredging Company Ltd
Location	Dublin, Ireland
Execution period	April - May 2004



- A** Manu Pekka and Cork Sand
- B** Manu Pekka
- C** Environmental Profiling Grab (EPG)
- D** Manu Pekka and Long Sand

