



Background:

A power station needed to protect its main cooling water inlets from floating eel grass, debris, fish and oil spill from within surrounding waters. Vikoma provided a fixed floating barrier using a neoprene sentinel oil boom in conjunction with an existing sonic fish deterrent. The boom was positioned to capture floating debris and eel grass on either side which enabled easy collection using a boat and preventing debris contaminating the production process.

Objective:

Customer objective 1 Barrier needed to protect intakes from oil spills.

Feedback A sentinel oil boom was fixed to a mooring buoy, protecting the inlets.

Customer objective 2 Barrier needs to protect from debris and eel grass.

Feedback With a 350mm freeboard foam floatation and 400mm below the waterline, debris and eel grass does not pass the barrier.

Customer objective 3 Barrier needs to move with the tides.

Feedback Stainless steel slider system incorporates.

Customer objective 4 Durable solution needed.

Feedback The boom was manufactured from strong, durable neoprene.

Solution:

Vikoma installed a foam filled oil containment boom. Sentinel 750 made from neoprene was selected, due to the durability and long life offered by the material. As well as acting as a barrier for oil, the boom is ideally suited to stopping floating debris with its 350mm freeboard foam floatation. The boom also has a skirt 400mm below the water, which stops anything just below the water line. The boom was tethered to a fixed buoy to keep it in position at the head of the structure. Two stainless steel slider systems were installed adjacent to the water intakes to allow the boom structure to move up and down with the rise and fall of the tide. To the left side of the system, a quick release gate was incorporated to allow access for water intake maintenance.

Optional Extra:

A silt curtain skirt could be added to the boom which would also protect the water inlets from algae and silt.



For further details please contact your local Vikoma partner or contact us directly on sales@vikoma.com