



Mr J. Meaken

Nuclear Services and Support Manager

Building N179

HM Naval Base

Devonport

Plymouth

PL2 2BG

Email: John.Meaken167@mod.uk

Tel:01752 553669

Fax: (01752 552783



Mr P Carey
Managing Director
MVV Environment Ltd
1 Wood Street
London, EC2V 7WS

Please reply to:
John Meaken
Our Reference:
SNW/784/9771/135.a
Date: 20 October 2010

Dear Mr Carey

COMBINED HEAT AND POWER INTERFACE WITH HELICOPTER FLYING

An assessment of the interaction of Helicopter Operations at Weston Mill Lake with the proposed Combined Heat and Power (CHP) plant is attached.

The rules/criteria for helicopter operations in the Naval Base are set out in the Joint Services Procedure (JSP) 554, which covers the operation of helicopters at domestic landing sites for day operations. JSP 554 requires that the normal maximum obstruction angle to obstacles within the selected approach and exit paths should not exceed 6 degrees as measured from the landing site out to a distance of 500m.

Following consultation with the Naval Base Helicopter Operators it has been agreed that the proposal for siting a CHP plant at Weston Mill Lake places the main building and flue stack clear of the flight path and the proposals will be compliant with JSP 554 criteria. In discussions you have agreed to ensure the appropriate lighting and signage will be implemented on the CHP plant and associated structures which will be a mandatory requirement in gaining planning consent.

It is therefore concluded that the proposed CHP plant location should not affect helicopter operations in the Naval Base.

Yours sincerely,

A handwritten signature in black ink that reads "J. Meaken".

J Meaken
Nuclear Services and Support Manager

Copy to:

Roundel Programme Manager
File

INTERFACE BETWEEN PROPOSED CHP PLANT AND HELICOPTER FLYING AT WESTON MILL LAKE

Background

1. The helicopter landing site at Weston Mill Lake is classed as a Domestic Helicopter Landing Site, a site available for the regular movement of passengers and stores in peacetime in day light. The site is principally used by the Flag Officer Training Flight for staff transfers to and from vessels at sea and for military helicopter movements to and from the Naval Base. Flag Officer Training Air Ops is the approving and control authority. Figure 1 provides further information on the Helo Site.

Approaches

2. Ideally the approach and exit paths should be obstruction-free and into wind. The minimum criteria to permit full flexible helicopter operations in day light requires the obstruction angle to obstacles along the approach and exit paths to not exceed 6° as measured from the landing site to a distance of 500m (max height 52m at 500m). Three options for the proposed Combined Heat and Power (CHP) plant were initially proposed; the current proposed layout plan is detailed in Figure 2. A section through the approach flight path running West is detailed in Figure 3. The existing buildings are shown with a pecked line drawn at 6°. Although not on the flight path, the proposed CHP is also shown together with the flue stack for each option. The requirement for the flight path to be clear of all obstructions out to 500m at 6° is fully met.

3. The extract from Helicopter Landing Site Hand Book details local hazards e.g. Mast (150ft) 200m East of Landing Site, two mobile tracked cranes (246ft) to South South East along jetty. In the event the CHP plant is built at WML an additional warning will need to be included in the Helicopter Landing Site Hand Book to cover the flue stack.

Impact from Helicopter on CHP

4. Military and Civil helicopters undergo stringent maintenance checks. A study of helo flights in and around the Dockyard concluded that the risk from helicopter failures was extremely low and tolerable. In order to reduce the risk to as low as is practical stringent management arrangements are in place to mitigate the risk from Low flying aircraft. Pilots are made aware of any tall structures in the vicinity of flight paths through the Helicopter Landing Handbook and tall structures are fitted with navigation lights in compliance with the Civil Aviation Authority Regulations and MoD Joint Service Procedure 554.

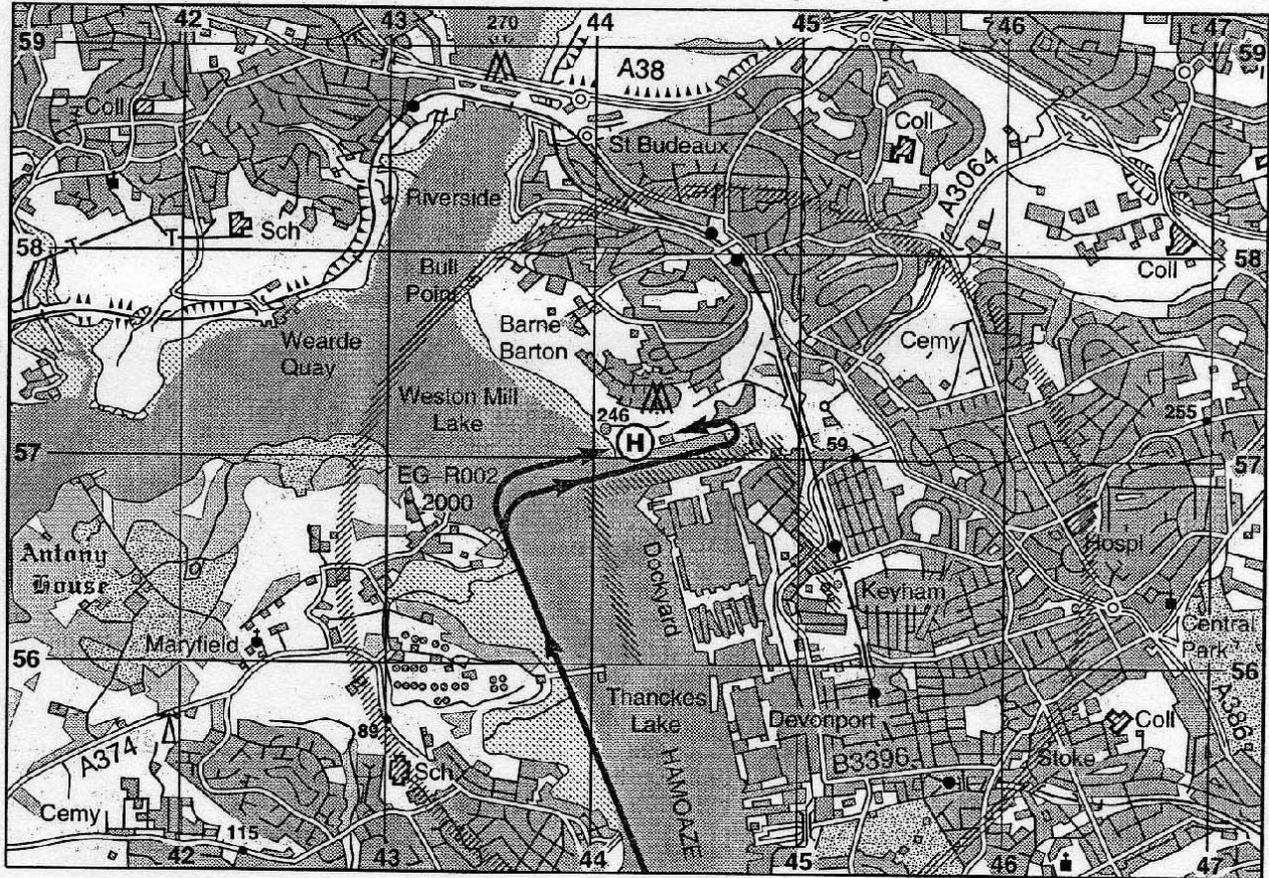
Conclusion

5. The location and structures of the proposed CHP plant do not prejudice the requirements of JSP 554 and therefore helicopter operations from Weston Mill Lake should not be affected. The Helicopter Landing Handbook will require to be amended to include the new hazard of the CHP plant flue stack should the plant be built at WML.

Figure 1 – Extract from Helicopter Landing Site Hand Book

PLYMOUTH, HM Naval Base, Weston Mill Lake (WML)

PPR



MAP GSGS 5215 201
N50 23-58 W004 11-60

ELEV 15FT

GRID REF SX442571
(24420-05710)

LOCATION NW side of Devonport Dockyard.
OPERATOR FOST (Plymouth Air Operations).
TELEPHONE Plymouth (01752) day 557751, night 557550. DFTS 9375 67751/67550. SMA: FOST
DEVONPORT (FAO) Air Ops, info NBC Devonport.
DESCRIPTION 25m square of concrete surrounded by grass, at the West end of the North arm of the jetty. White 'H' displayed and windsock.
LIGHTING NIL.
RADIO NIL (Contact *Plymouth Mil* 281-475 MHz/121-25MHz).
FUEL F34/44. Engine running rotors stopped refuelling available. Pilot/aircrewman may be required to supervise fuelling.
EMERGENCY SERVICES Regulation Fire Equipment.

HAZARDS Mast (150ft) 200m East of LS.
Two mobile tracked cranes (246ft lit) to the SSE along jetty.
Shipping alongside jetty.
Portacabin (10ft) 20m SW of Pad.
Windsock (15ft) 30m SSE.
Possible FOD on Western approach, due to tides.
REMARKS Daylight hours only at FOST Air Operations discretion (normally 0800-1600 Mon - Thu, 0800-1400 Fri). LS exists within EG-R002 (1nm and 2000ft). Penetration of R002 is only authorised for aircraft using WML LS. All approaches to the LS are to be made from the Hamoaze and are to conform to the profiles illustrated depending on the prevailing wind.
Aircraft are not to fly South of the centreline of Weston Mill Lake inside the boundary of EG-R002.
Aircraft are not to overfly any ship or submarine moored, at anchor or sailing within the dockyard or Sound. Additionally, aircraft are to remain clear of the housing estate to the North and the railway bridge to the East.
SEA KING Mk 3A IDENT EGP 44.

Figure 3 – Section Through Approach Path

