



WasteServ Malta Ltd

**Request for Renewal of  
IP 0001/06 (IPPC Permit for  
Ghallis)**

**MEPA Review May 2012**

**WSM Reply June 2012**

MEPA Review 29<sup>th</sup> May 2012

Annex I

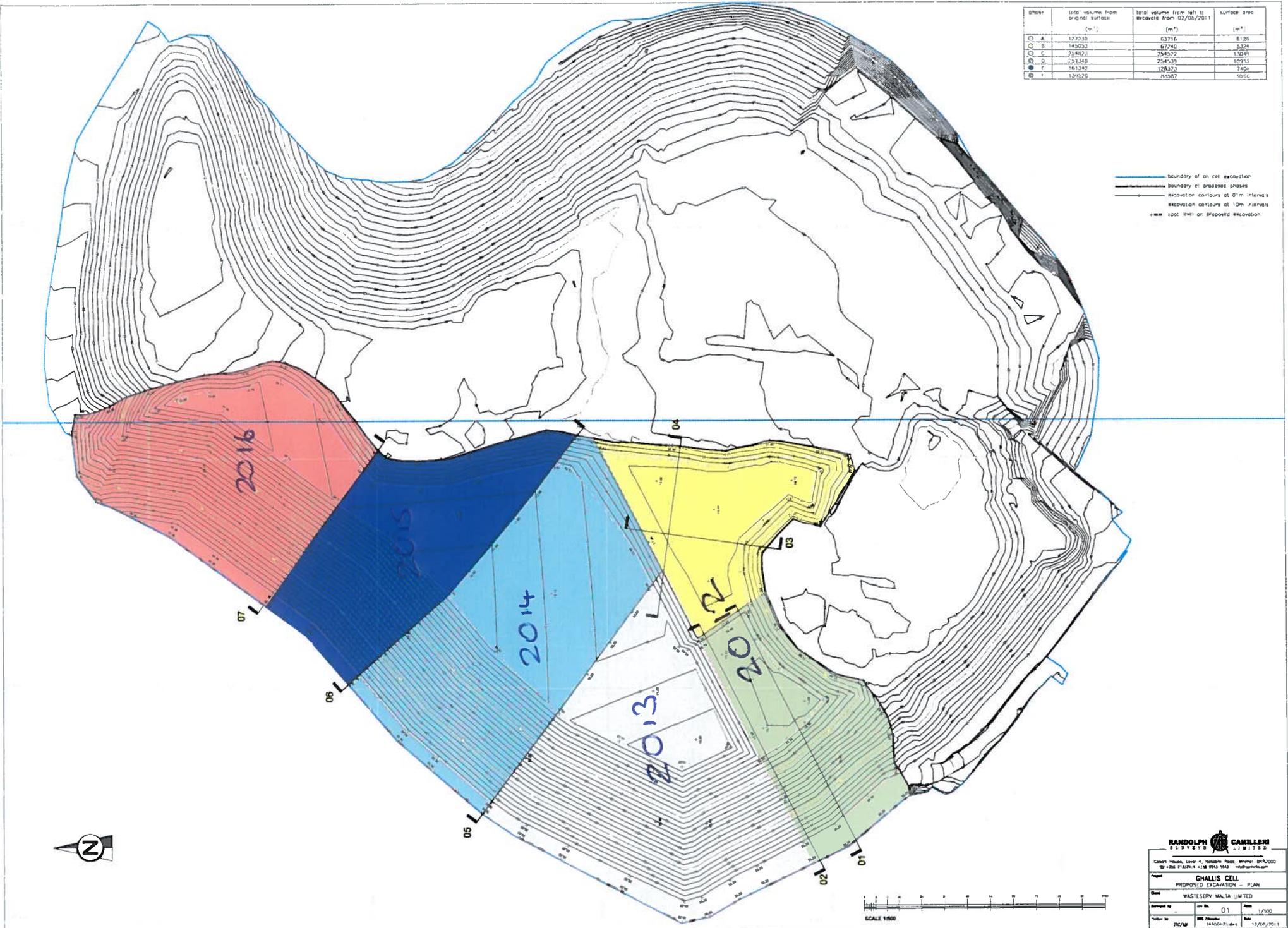
Reference	Further information required	Reply WSM June 2012
Annex 1	<p>(i) <i>Inspection and maintenance contract:</i> In the Site Management System document submitted as part of the original IPPC application, section 13.3 (Sub-Surface Structures) makes reference to an inspection and maintenance programme. Kindly provide a copy of this programme, together with any results of previous inspections/maintenance sessions (checks had to be undertaken at maximum 3 yearly intervals);</p> <p>(ii) <i>Final version of closure plan:</i> Kindly provide a timeframe for the submission of this plan;</p> <p>(iii) <i>Tipping design for Ghallis:</i> Reply (June 2009) to MEPA memo on compliance with permitting issues states that a tipping design for the landfill had to be incorporated as part of the closure plan (which was to be submitted by end of March 2010). Kindly submit a copy of the tipping design for this site.</p>	<p>(i) Feedback submitted in June 2009 WSM informed MEPA that this item is relevant to pipework, etc. in connection with the landfill gas management system. Since this is not fully in place an inspection and maintenance contract is not yet in place.</p> <p>(ii) By end 2013</p> <p>(iii) WSM's understanding is that MEPA would like to be informed how the different cells of the landfill will be filled and the final outline. Kindly refer to drawing in Annex 1 to this submission; this shows how the development of the landfill shall proceed over the next few years. Infilling of the new cells shall occur in the same order but not necessarily at the rate indicated.</p>
Annex 2	<p>(i) Please indicate the amount of void space (and remaining lifetime) for each area/cell.</p>	<p>The void space model is currently being updated with recent information. Further information on available void space shall be provided during a presentation by Perit Adrian Mifsud.</p>
Annex 3	<p>(i) <i>Section 4.2.1:</i> Please provide details on how temperature monitoring will be conducted and what standards/thresholds will be used for the interpretation of</p>	<p>(i) Temperature will be monitored at gas wells and collectively from manifolds. Normally a temperature between 40°C and 70°C would be expected. In event of subterranean fire,</p>

	<p>the monitoring data;</p> <p>(ii) <i>Gas Treatment Plant:</i> Kindly indicate what measures will be in place to ensure adequate pre-treatment. In addition kindly clarify (i) the use of the collected gas; (ii) capacity of the CHP plant, and; (iii) whether any monitoring of the pre-treated and/or exhaust gas is envisaged.</p>	<p>temperatures will indicate as these may become more elevated but if this happens the first indication would be the amount of CO2 present in the landfill gas (which is monitored).</p> <p>(ii) The engine does not require pre-treatment of the gas as it can tolerate the gas currently being generated. The CH4% in the LFG helps to burn any other traces of gas inside the engine. The CHP on full load requires approximately 80Nm<sup>3</sup>/h of landfill gas. The plant is equipped with a continuous gas monitoring system for monitoring of the inlet gas. Exhaust gas monitoring shall be in accordance with the IPPC permit.</p>
Part C	<p>(i) Section C1.3: “<i>Material used for daily cover varies from material originating from the excavation of the landfill itself to contaminated inert material</i>” – Please provide further information as to type and quality of the <i>contaminated inert material</i>.</p>	<p>The term ‘contaminated material’ refers to inert construction and demolition waste which is not suitable for deposit in disused quarries due to for example contamination with other items such as green waste, wood, etc. and which cannot be removed.</p>

# **ANNEX 1**

Phase	Total volume from original surface (m <sup>3</sup> )	Total volume from left to excavate from 02/05/2011 (m <sup>3</sup> )	Surface area (m <sup>2</sup> )
0 A	122230	63716	8125
0 B	148033	67940	5324
0 C	254823	254532	13041
0 D	251340	254533	10943
0 E	181382	128372	7425
0 F	134022	10267	1056

- boundary of an cell excavation
- boundary of proposed phases
- excavation contours at 01m intervals
- excavation contours at 10m intervals
- spot level or proposed excavation



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Project: **GHALI'S CELL PROPOSED EXCAVATION - PLAN**

Client: **WASTESERV MALTA LIMITED**

Designed by:	Rev. No.:	Date:
Checked by:	01	1/2008
Drawn by:	Rev. Number:	Date:
JBC/AM	14800001-001	12/02/2011