September 2010

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# APPLICANT : CEMEX (ROI) LTD

# WL0254-01 - Article 14 Response - Walshestown Co. Kildare

**Submitted to:**
Eva Babiarczyk
Environmental Protection Agency
Headquarters
PO Box 3000
Johnstown Castle Estate
Co. Wexford





REPORT

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# PREAMBLE

On behalf of Cemex (ROI) Ltd. (the Applicant), Golder Associates (Golder') submitted a Waste Licence Application to the Environmental Protection Agency (EPA) in December 2008 (W0254-01). On 30 July 2010 in accordance with Article 14 of the Waste Management (Licensing) Regulations, the EPA requested information from the Applicant in order to further process the waste licence application. A copy of this Article 14 request is contained in Appendix 1 of this document.

### Amendments to Original Scheme

From the outset it is important to outline that during the planning process for this restoration project (Planning Reference No. 08/2159), the Applicant was requested by Kildare County Council (KCC) to present an alternative restoration plan, which was significantly reduced in terms of elevation, finished restoration surface and volumes proposed for importation. The reduced landform was adjusted to take into account comments made by KCC at a consultation meeting on 6 May 2009 (part of Further Information process).

The following table highlights the significant differences between the original proposed restoration scheme, submitted both to KCC and the EPA for planning and waste licence applications respectively (December 2008) and the recently revised scheme as a result of the planning process. It is noted that KCC granted permission for this revised scheme in May 2010.

**Table 1: Differences between December 2008 and revised September 2010 proposed Restoration Plan for Walshestown Pit**

| Details | Original Scheme December 2008 | Revised Scheme September 2010 | Net Reduction | Net Reduction in % |
|---|---|---|---|---|
| Volumes | 4.2 million $m^3$ | 2.4 million $m^3$ | 1.8 million $m^3$ | ca. 44% |
| Tonnages | 7.6 million tonnes | 4.3 million tonnes | 3.3 million tonnes | |
| Tonnes per annum | 600,000 tonnes | 330,000 tonnes | 270,000 tonnes | |



As can be observed from the above table, the proposed amount of inert materials to be imported into the Application Site has been reduced by ca. 44% from the original proposal in December 2008. This will result in a significant reduction in the throughput of inert materials imported onto the site on an annual basis and can only be seen as a positive in terms of reducing the potential impacts on the local community and environment relative to the first scheme proposed in December 2008.

> ***Note:*** *The revised scheme presented to the Agency in this document is now aligned with Planning Permission Reference No. 08/2159.*

### Article 14 Response

Each of the 7 no. items highlighted in the Article 14 request are responded to in Sections 1.0 to 7.0 below (details of the request for information are highlighted in italics at the beginning of each section). There are 8 No. Appendices (1 to 8 inclusive) to support this response.

# 1.0 RESPONSE TO ITEM 1

*"Provide all revised information under Section H: Materials Handling of the application form to reflect the proposed changes to the amount of waste to be accepted at the site over its lifetime".*

**Response:** Section H of the Waste Licence Application has been revised to reflect the changes in the revised scheme as highlighted in the preamble to this document (Table 1). Revised Section H documents are included in Appendix 2 (Version A.3).

# 2.0 RESPONSE TO ITEM 2

*"Provide a timeframe for the replacement of the existing on-site septic tank with a new wastewater treatment system. Provide the operational details of this new system".*

**Response:** Mr Aidan Comerford of Waste Water Maintenance Ltd. was retained by Golder to undertake an on-site suitability assessment and percolation tests on this site. Details of this assessment are included in Appendix 3. Mr Comerford concluded that the existing system at the Site did not meet EPA guidelines. Rather than upgrading the existing system the Applicant has proposed a new proprietary wastewater treatment system.

This system has been accepted and approved by Kildare Co. Council under Planning Permission Reference No. 08/2159. Details of the proposed system and Mr. Comerford's Site Suitability Report and Site Characterisation Form are included in Appendix 3 of this document.

With regard to timeframe, it is the Applicant's intention to commence site preparations upon grant of the Waste Licence from the Agency. As part of the site preparation phase, the Applicant proposes to install the new proprietary system within 3 months of commencement of activities, or within such timeframe as required by the Agency.



# 3.0 RESPONSE TO ITEM 3

*"Provide details on the procedure for the control and management of rainwater ingress into the landfill body".*

## 3.1 Operational management to prevent rainfall ingress

During the restoration activities and following completion of the landform, there will be a need to manage rain water ingress and runoff at the Application Site for the full life-cycle of the landfill. By managing rainwater in an effective manner from the initiation of the project to completion, rainwater ingress through the waste body will be kept to a minimum.

These objectives will be achieved by:

- The construction of an infiltration swale at the foot of the screening berm around the northern and western site perimeter to collect clean rainfall runoff from the progressively restored surface and allow it to infiltrate to ground;
- Excessive rainwater runoff from this infiltration swale will be accommodated in a proposed pond on the western boundary where infiltration to ground will also be encouraged to occur through the base and sides. Provision for overflow from this pond will be installed, which will feed to Pond B towards the south of the Site;
- During the operation and development of the Site, the area of exposed soils will be kept to a minimum and all temporary surfaces will be graded to encourage run-off to surface water collection/infiltration drains around the Site boundaries;

- To prevent ponding in contours on the restored surface and minimise infiltration to the backfilled body, temporary and/or permanent collector trenches will be constructed within zones, as required, to direct water to the perimeter infiltration trench;
- Temporary vegetation cover shall be encouraged on exposed surfaces awaiting final restoration; and
- The final restoration surface contours are designed and will be constructed, in such a manner that will encourage rainfall to shed to the perimeter infiltration trench.

Further information on these measure proposed above are depicted in Drawing No. WLA-04 and WLA-12. (Appendix 7).

## 3.2 Phasing of Restoration Works

The conceptual plan for the Site is to develop this lined inert facility in distinct zones, as identified through a progressive filling and restoration scheme.

Restoration filling will occur behind the screening berm and continue until such time as it is necessary to start another stage or bench. Any previously unlined ground will be lined before it is filled over, so that as benching progresses, lining progresses. A schematic cross-sectional representation of this filling process, moving from the low ground up to the higher ground, has been presented in Drawing No. WLA-14 Progressive development of the grassed restoration surface, through to completion, has also previously be presented in Drawing No. WLA-13 (Appendix 7).

The approach to be adopted will help to both protect the surface water and groundwater environment into the future and to preserve the catchment water balance.

Rainfall infiltration to the uncovered waste mass has been reported in the EIS at an estimated 527mm per annum at the Site. Following capping, this is expected to reduce to approximately 136mm per annum, or by an approximate four-fold decrease. This reduction demonstrates the relative significance of diverting rainwater ingress from the waste mass (as a consequence of progressive capping as proposed), and ensuring it remains clean. Infiltration management is known to be a key yet standard practice for employment at such restoration sites.



# 4.0 RESPONSE TO ITEM 4

*"Provide information on the amount and the type of waste that has been placed on site since the start of the disposal activities to date. Provide a drawing showing the areas where the waste disposal took place".*

## 4.1 Background to Existing Waste Permits for Walshestown Site

A waste permit application was lodged with Kildare Co. Council in March 2002 by Mr. Nick Beale, General Manager of Readymix (Dublin) Ltd. (now Cemex (ROI) Ltd – the Applicant). Following this, a Waste Permit was issued by KCC on 13 June 2002, for the acceptance of inert subsoil, topsoil, sand, gravel, clay, marl, stone and inert concrete waste to restore/raise the Site (Condition 4.1). A copy of this Permit (WPR 71/2002) is included in Appendix 4.

In June 2006 an application for renewal of this Permit was submitted to KCC. On 27 July 2007, KCC requested that the Applicant submit a Waste Licence Application, which is now the subject of this Article 14 request. Subsequent to this application in 2006, and following ongoing communications with KCC, a temporary waste permit was issued to the Applicant on 23 July 2008, pending the outcome of the waste licence application for the Site. This temporary waste permit was to allow the importation of ca. 80,000 tonnes of inert soils from a proposed road improvement scheme in the area. A copy of this temporary waste permit for the Site is also included in Appendix 4 (WPR 236/2006).

## 4.2 Response from Applicant

Golder contacted Mr. Brian Downes, Planning & Environmental Manager with Cemex (ROI) Ltd. (the Applicant) to gather further information on waste that has been placed at the Walshestown Site to date. Following discussions with Mr. Downes, it was confirmed that the then regional Manager (Mr. Nick Beale) no longer works for the Applicant. Whilst a temporary waste permit was issued for the Site in July 2008 (Section 4.1 above) for waste soils to be imported from a local road improvement scheme (Dowdenstown), the Applicant confirmed that this permit was never acted upon as the road scheme never went ahead.

Following this an in-house review of documents was undertaken by the Applicant, and no records were found relating to volumes/tonnages of waste placed at the Walshestown Site.

Furthermore, Cemex has confirmed to Golder in September 2010 that the only active Waste Permit for the Site was Permit No. 71/2002.

## 4.3 Review of Files with KCC

On behalf of the Applicant, Golder contacted the Environment Section of KCC, and requested Waste Permit File No. 71/2002 to be taken out of archive. A Golder representative visited the KCC offices on 23 September 2010 to view these files. No records regarding the amount of waste placed at the Site were present in these files. According to KCC, no Annual Environmental Review (AER) reports were on file relating to the Walshestown Site.

Golder also viewed Waste Permit File No. 236/2006. A site inspection sheet was located in this file dated 9th January 2009, which stated the following:

> *Site is not active, no waste imported onto the Site. The Dowdenstown road widening is not due to start until sometime in 2010.*

This further indicates that the Site was not active under WPR 236/2006. A copy of this site inspection sheet is provided in Appendix 4.



## 4.4 Survey of Raised Area on Site

On 16 September 2010, representatives from Golder and the Applicant visited the Site to walkover the Site and delineate an area where inert materials are understood to have been placed to restore/raise the lands. Figure No. 8.11 attached in Appendix 4 delineates the approximate area which is understood by the Applicant to have been subject to restoration/land-raising activities under Waste Permit WPR71/2002.

## 4.5 Proposed Site Activities

It is noted that should the Agency grant a licence for this Facility, the area delineated on Drawing No. 8.11 will be excavated in preparation of a liner for the Facility. Any waste concrete will be recycled at the Inert Waste Processing Area located towards the front entrance of the Facility, and reused as secondary aggregate for development at the Facility, subject to Agency approval.

# 5.0 RESPONSE TO ITEM 5

*"Provide all revised elements of the EIS referred to in your correspondence dated 12 January 2010".*

Table 2 overleaf provides a summary of EIS Sections, which have been revised to reflect changes in waste volumes proposed to be accepted at the facility (i.e. reduction by 44% as described in the preamble of this document).

**Table 2: Summary of Revised EIS Sections**

| EIS Section | Title | Version History | Summary of Changes |
|---|---|---|---|
| 7.0 | Waste Acceptance and Characterisation | A.3 (September 2010) | Edited to reflect changes in tonnages to be accepted at facility. |
| 8.0 | Site Description of Proposed Development | A.5 (September 2010) | Edited to reflect changes in tonnages to be accepted at facility. |
| 10.0 | Ecology | A.3 (September 2010) | Revised Restoration Surface |
| 16.0 | Landscape | A.5 (September 2010) | Revised Restoration Surface |

Copies of the revised EIS sections are included in Appendix 5 of this document.

## 5.1 Additional Copies for Circulation

As requested in the Article 14 letter, 16 no. copies (CD-ROM) of the above Sections of the EIS will be included in this submission. Copies of the revised EIS Figures relating to these sections will also be included in the CD-ROM's supplied.



# 6.0 RESPONSE TO ITEM 6

*"Your reply should include a revised non-technical summary which reflects the information you supply in compliance with the notice, insofar as that information impinges on the non-technical summary".*

A revised technical summary (Version A.3, September 2010), is attached in Appendix 6.

## 7.0 RESPONSE TO ITEM 7

*"In the case where any drawings already submitted are subject to revision consequent on this request, a revised drawing should be prepared in each case. Where such revised drawings are submitted, provide a list of drawing titles, drawing numbers and revision status, which correlates the revised drawing with the superseded versions".*

Table 3 below summarises the relevant waste licence application drawings, previously submitted to the Agency in December 2008, under Attachment M. The previous A Versions have been superseded by the current B Versions, issued in September 2010, and attached in Appendix 7 of this document.

**Table 3: List of Revised Waste licence Application Drawings**

| Drawing Ref. No. | Superseded Version (Issued Dec. 2008) | Current Version (Issued Sept 2010) | Description |
|---|---|---|---|
| WLA-04 | A | B | Initial Development and Filling Plan |
| WLA-05 | A | B | Plan of Facility Reception and Proposed Inert Waste Processing Area |
| ~~WLA-10~~ | ~~A~~ | ~~B~~ | ~~Proposed Maintenance Area in Existing Sheds~~ – *Drawing Discontinued – During the planning process, local residents requested that these sheds were not to be used for maintenance purposes and the Applicant upheld this request.* |
| WLA-12 | A | B | Sequencing of Initial Drawing Works |
| WLA-13 | A | B | Conceptual Restoration Filling Plan |
| WLA-14 | A | B | Conceptual Restoration Filling Plan (Schematic) |
| WLA-15 | A | B | Emissions Points and Existing Monitoring Locations |
| WLA-16 | A | B | Existing & Proposed Groundwater & Surface Water Monitoring Locations |
| WLA-17 | A | B | Proposed Final Restoration Plan |

Table 4 below summarises the relevant EIS Figures, which were previously submitted to the Agency in December 2008 in Volume I of the EIS. These previous A Versions have been superseded by the current B Versions, issued in September 2010, and are attached in Appendix 8 of this document.

**Table 4: List of Revised EIS Figures**

| EIS Ref. No. | Superseded Version (Issued Dec. 2008) | Current Version (Issued Sept 2010) | Description |
|---|---|---|---|
| 8.1 | A | B | Existing Site Conditions |
| 8.2 | A | B | Aerial Photo (2005) |
| 8.3 | A | B | Final Restoration and Drainage Plan |
| 8.4 | A | B | Initial Development Plan Showing Drainage |
| 8.5 | A | B | Proposed Infrastructure and Material Processing Area |
| 8.6 | A | B | Facility Reception & Material Processing Area (Sections 5 & 6) |
| 8.7 | A | B | Sequencing of Initial Drainage Works |
| 8.8 | A | B | Final Restoration Surface Cross Sections 1 to 7 |
| 8.9 | A | B | Conceptual Restoration Filling Plan |
| 8.10 | A | B | Conceptual Restoration Filling Plan (Schematic) |
| 10.3 | A | B | Final Restoration Plan |
| 16.5 | A | B | Conceptual Restoration Filling Plan |
| 16.6 | A | B | Final Restoration Plan |

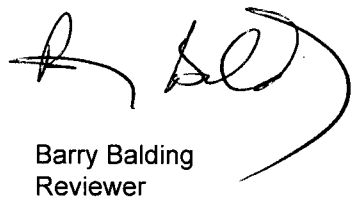


As highlighted in Section 5.1 above, these revised EIS Figures will also be provided in the 16. No. CD-ROM copies, as requested in the Article 14 letter.

# Report Signature Page

**GOLDER ASSOCIATES IRELAND LIMITED**

Conor Wall
Project Manager



Barry Balding
Reviewer

Date: 24 September 2010

Author: Conor Wall/BB/aw

Registered in Ireland Registration No. 297875
Town Centre House, Dublin Road, Naas, Co. Kildare, Ireland
Directors: M. Gilligan, M. L. J. Maher, A. Harris (British)
VAT No.: 8297875W