

14 March 2012

AURORA PLACE 88 PHILLIP STREET SYDNEY  
GPO BOX 521 SYDNEY NSW 2001 AUSTRALIA  
DX 117 SYDNEY [www.minterellison.com](http://www.minterellison.com)  
TELEPHONE +61 2 9921 8888 FACSIMILE +61 2 9921 8123

**BY EMAIL**      [kerry.hamann@planning.nsw.gov.au](mailto:kerry.hamann@planning.nsw.gov.au)

Kerry Hamann  
Environmental Planning Officer,  
Major Projects Assessment  
NSW Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Ms Hamann

**Modification Application 06\_0184 MOD3 – Response to Submissions  
Pasminco Cockle Creek Smelter Pty Ltd (Subject to Deed of Company Arrangement)**

On 16 December 2011, a request to modify project approval 06\_0184 (**Approval**) for the remediation of the Pasminco Cockle Creek Smelter Site was made to the Director-General of the NSW Department of Planning and Infrastructure (**Department**), pursuant to section 75W of the *Environmental Planning and Assessment Act 1979* (**Modification Application**).

Three submissions were received by the Department in relation to Modification Application, from:

- Lake Macquarie City Council (**Council**) on 10 February 2012,
- the Environmental Protection Authority (**EPA**) on 14 February 2012, and
- Graeme Nyland of ENVIRON Australia Pty Ltd on 24 February 2012.

Copies of the submissions are attached to this letter as Annexure A. Our response to these submissions is set out below and supported by the documents attached to this letter as Annexure B. Also attached is a set of draft conditions which the Proponent would accept as part of the approval of the s75W application (Annexure C).

*Submission from Lake Macquarie City Council*

The Council indicates that it raises no objection to the provision of a composite capping layer to the remainder of the containment cell, providing:

- formal approval and certification for the placement and completion is received from the Contaminated Site Auditor overseeing the remediation and validation of the site,
- a revised Environmental Management Plan (**EMP**) is prepared by the Contaminated Site Consultant and approved by the Contaminated Site Auditor,
- a scaled site survey plan of the cell is produced which accurately identifies and delineates both the existing 600mm and proposed composite capping layer on completion, and

- a schedule of approved plant species is provided in, or attached to the Environmental Management Plan for future landscaping of the site (in case any landscaping is completed) or addressed by the auditor who may require future approval of a qualified horticulturalist.

The queries raised by the Council are addressed in the technical memorandum prepared by Golder Associates, dated 6 March 2012, included within Annexure B to this letter. However, we advise in relation to these matters:

- approval and certification will be obtained from the Site Auditor in the form of a Site Audit Statement and Site Audit Report on the suitability of the changes to the containment cell to meet the remediation objects of the site, pursuant to condition 3.3 of the Approval,
- a Containment Cell EMP will be prepared, pursuant to conditions 8.6 and 8.7 of the Approval, that includes work method statements for breaching the proposed containment cell capping layer, and which must be approved by the Director-General of the Department and the Office of Environment and Heritage. Copies of this EMP will be made available once this occurs,
- the applicant will accept conditions of the proposed modification requiring preparation of:
  - a scaled site survey plan of the cell which accurately identifies/delineates both the existing 600mm and proposed composite capping layer on completion, and
  - a schedule of approved plant species to be provided in, or attached to the Containment Cell EMP, prepared in accordance with conditions 8.6 and 8.7 of the Approval, for future landscaping of the site (in case any landscaping is contemplated), or alternatively, is addressed by the auditor who may require future approval of a qualified horticulturalist prior to planting.

These conditions are set out in Annexure C.

#### Submission from Environmental Protection Authority

The EPA has requested further information to clarify the following query:

*'The proposal states that the 150mm subsoil gravel drainage layer, with subsoil drainage collection pipes would be replaced with a geo-composite drain of thickness 5-10 mm and that there would be no change to the drainage pipe layout and spacing. In the current design the noted drainage piping system is within the 150 mm subsoil gravel drainage layer which is proposed to be deleted. In what layer will the drainage piping system be located, or what will be the configuration for the placement of the drainage piping system?'*

The matter raised by the EPA in respect of the revised drainage design is fully addressed in the technical memorandum prepared by Golder Associates, dated 1 March 2012, which is also included within Annexure B.

#### Submission from ENVIRON Australia Pty Ltd

Graeme Nyland has indicated that he has no objections to the Modification Application. He expects:

- the geomembrane layer performs as well as the clay cap,
- the geosynthetic drainage system provides adequate drainage, and
- both ensure there is no increase in the leachate generated.

Mr Nyland does not seek any specific clarification in relation to these design changes.

Please contact Duncan McGregor on (02) 9921 4502 if you have any questions about this letter.

Yours faithfully

**MINTERELLISON**

  
Duncan McGregor  
Partner

Contact: Luke Walker Direct phone: +61 2 9921 4793 Direct fax: +61 2 9921 8124  
Email: luke.walker@minterellison.com  
Partner responsible: Duncan McGregor Direct phone: +61 2 9921 4502 Direct fax: +61 2 9921 8279  
Our reference: ARS:DRM 30-3562050

"A"

Lake Macquarie City Council



10 February 2012

Mr Chris Ritchie  
Manager - Industry Major Development Assessment.  
NSW Planning and Infrastructure  
GPO Box 39  
Sydney NSW 2001

Dear Mr Ritchie

**Subject: Pasmenco Cockle Creek Remediation (06\_0184 Mod 3)**

Thankyou for the opportunity to comment on the proposed modification to the Pasmenco containment cell.

Golder and Associates have indicated that a modified Environmental Management Plan (EMP) will be prepared, which Council considers essential to the project, particularly when the capping layers are being altered and a future use as an active recreation is contemplated.

The EMP must address the potential for breaching the capping layer during any future building construction (if contemplated), or landscaping and restrictions to use of the site.

In this regard, site excavations to accommodate amenity buildings, lighting, and goal post construction may require breaching the capping layer, so the EMP will need to incorporate comprehensive work method statements for reference by construction personnel.

There will be, in addition to the capping layer, drainage layer, 600mm of subsoil and 150mm of topsoil, which will support vegetative coverage and shrubs etc, however it is Council's understanding that trees will be precluded due to the potential for their root systems to breach the capping layer and infiltrate the encapsulated contaminants.

It would be shortsighted at this stage to overlook the landscaping potential of this area, and for that reason, an inclusion within the audit statement may clarify their position on allowing or precluding flora.

Council raises no objection to the provision of a composite capping layer to the remainder of the containment cell, but on the following understanding:-

Formal approval and certification for the placement and completion is received from the Contaminated Site Auditor overseeing the remediation and validation of the site.

A revised EMP is prepared by the contaminated site consultant and approved by the Contaminated Site Auditor.

A scaled site survey plan of the cell is produced which accurately identifies and delineates both the existing 600mm and proposed composite capping layer on completion.

A schedule of approved plant species is provided in, or attached to the EMP for future

126-138 Main Road Speers Point NSW 2284 • Box 1906 Hunter Region Mail Centre NSW 2310

Phone: 02 4921 0333 • Fax: 02 4958 7257 • ABN 81 065 027 868

[council@lakemac.nsw.gov.au](mailto:council@lakemac.nsw.gov.au)

[www.lakemac.com.au](http://www.lakemac.com.au)

Our Ref: F2010/02489 Your Ref: 10/21869

landscaping of the site (in case any landscaping is contemplated), or alternatively, is addressed by the auditor who may require future approval of a qualified horticulturalist prior to planting.

I realise that whilst there may be pending strategy changes for the future use and management of the site, a " crystal ball" approach may address some contingencies arising in the long term environmental management of this area.

I trust that Council has contributed positive and workable feedback for your consideration, and should you require further information or assistance, please contact me on 4921 0307.

Yours faithfully

Chris Baker  
**Principal Environmental Officer - Environment  
Waste, Environment & Rangers Department**

## Alex Skinner

---

**Subject:** Pasminco Remediation Mod 3

**From:** Tessa DeJosselin [<mailto:Tessa.DeJosselin@planning.nsw.gov.au>]  
**Sent:** Tuesday 14 February 2012 12:16 pm  
**To:** Duncan McGregor  
**Cc:** [John.Coffey@environment.nsw.gov.au](mailto:John.Coffey@environment.nsw.gov.au); Chris Ritchie; Kerry Hamann  
**Subject:** Pasminco Remediation Mod 3

Dear Mr McGregor

In response to the Pasminco Remediation modification application (06\_0184) it is requested that you provide further information to clarify the following queries;

The proposal states that the 150mm subsoil gravel drainage layer, with subsoil drainage collection pipes would be replaced with a geo-composite drain of thickness 5-10 mm and that there would be no change to the drainage pipe layout and spacing. In the current design the noted drainage piping system is within the 150 mm subsoil gravel drainage layer which is proposed to be deleted. We ask, in what layer will the drainage piping system be located, or what will be the configuration for the placement of the drainage piping system?

Please send your response to both the Department and the Environmental Protection Authority.

If you have any questions please contact me on 9228 6436

Kind Regards

**Tessa de Josselin**

**Environmental Planning Officer**- Major Projects Assessment  
NSW Department of Planning & Infrastructure | GPO Box 39 | Sydney NSW 2001  
T: 02 9228 6436 [tessa.dejosselin@planning.nsw.gov.au](mailto:tessa.dejosselin@planning.nsw.gov.au)

---

-----  
This message is intended for the addressee named and may contain confidential/privileged information. If you are not the intended recipient, please delete it and notify the sender.  
Views expressed in this message are those of the individual sender, and are not necessarily the views of the Department.  
You should scan any attached files for viruses.  
-----

24 February 2012

Our Ref: AS120933

Department of Planning and Infrastructure  
Attn: Chris Ritchie  
GPO Box 39  
Sydney NSW 2001

via email: [chris.ritchie@planning.nsw.gov.au](mailto:chris.ritchie@planning.nsw.gov.au)

Dear Chris

**Re: Pasminco Cockle Creek Remediation (06\_0184 Mod 3)**

Thank you for your letter dated 24 January 2012 providing information about an application to modify the approved containment cell design for the above project.

I am conducting a site audit in relation to the Pasminco Cockle Creek site. The containment cell is being constructed as part of the remediation. I understand that the containment cell design was reviewed by the previous Contaminated Site Auditor, Dr W.R. Ryall. My role may require me to review the contamination status of the material to be used within the cell cap to verify site suitability for future use, but I am not involved in the design of the cell itself. My role may also involve monitoring of potential leaching from the cell as part of the overall site groundwater monitoring.

I provide the comments below on the proposed changes to the containment cell design, in relation to their possible impact on contaminant management:

***Use of a geomembrane layer to replace the portions of the u2C cap for the Containment Cell affected by the short-fall in supply***

Comments: The geomembrane should be able to provide equivalent performance to the clay cap.

***Use of a geosynthetic drainage system to replace the approved gravel drainage system in areas where geomembrane is used***

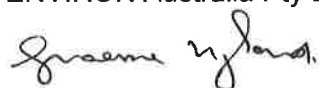
Comments: The geosynthetic drainage system should be able to provide adequate drainage.

***Flattening of the gradient of the Containment Cell slope from 3% to 2% on the top deck of the cell structure.***

Comments: While this proposed change could increase infiltration, the capping and drainage system if properly designed should ensure that there is no increase in leachate generated.

I therefore have no objections to the proposed changes.

Yours faithfully  
ENVIRON Australia Pty Ltd



Graeme Nyland  
Contaminated Sites Auditor

**DATE** 1 March 2012

**PROJECT No.** 06623099-716-M-Rev0

**TO** Mr Wayne Woodward  
Ferrier Hodgson

**CC**

**FROM** Daniel Dohle, Gary Schmertmann

**EMAIL** ddohle@golder.com.au

**PASMINCO COCKLE CREEK SMELTER  
RESPONSE TO AGENCY QUERY REGARDING SUBSOIL DRAINAGE PIPES  
PROPOSED DESIGN CHANGES FOR CONTAINMENT CELL CAP**

This memo responds to a request for clarification from the Department of Planning and Infrastructure (DoPI) regarding our letter report of 15 December 2011 titled *Pasminco Cockle Creek Smelter, Proposed Design Changes for Containment Cell Cap* (ref. 06623099-698-L-Rev1).

The request from Tessa de Josselin of DoPI was as follows:

*The proposal states that the 150mm subsoil gravel drainage layer, with subsoil drainage collection pipes would be replaced with a geo-composite drain of thickness 5-10 mm and that there would be no change to the drainage pipe layout and spacing. In the current design the noted drainage piping system is within the 150 mm subsoil gravel drainage layer which is proposed to be deleted. We ask, in what layer will the drainage piping system be located, or what will be the configuration for the placement of the drainage piping system?*

Clarifying information is as follows:

Each subsoil drainage collection pipe will be positioned directly above the geocomposite drain and will be surrounded by a zone of drainage gravel (defined as Unit 8 in the Technical Specification). The drainage gravel surround will provide a direct hydraulic connection between the pipe and the geocomposite drain. The drainage gravel surround will project approximately 200 mm upward into the 600 mm thick subsoil layer (Unit 19) and will be separated from the subsoil by a filter geotextile (Unit 13).

Detailed design of the system has not yet been performed. During detailed design, dimensions for the gravel surround will be established. Detailed design will also consider the need to slightly lower (i.e. by 50 to 100 mm) the elevation of the capping system liner and geocomposite drain along the alignment of the drainage collection pipe in order to allow the pipe to be positioned with its invert elevation below the elevation of the adjacent geocomposite drain, and to therefore direct greater subsurface flow into the pipe.

We hope that this memo provide the requested clarification in sufficient details. Please do not hesitate to contact us should you have any queries.



Daniel Dohle  
Senior Waste Management Engineer



Dr Gary Schmertmann  
Associate

DD/GRS/gj

\\syd1-s-file02\jobs\06proj\051-100\06623099\_pasminco\_remediation\_cockle\_creek\deliverables\06623099\_716\_m\_rev0 cap redesign dopi query.docx

**DATE** 06 March 2012

**PROJECT No.** 06623099-718-M-Rev0

**TO** Wayne Woodward  
Ferrier Hodgson

**CC**

**FROM** Daniel Dohle, Gary Schmertmann

**EMAIL** ddohle@golder.com.au

**RESPONSE TO QUERIES BY COUNCIL AND AUDITOR RELATING TO THE PASMINGO  
CONTAINMENT CELL CAP DESIGN MODIFICATION APPLICATION (SECTION 75W)**

Dear Wayne,

This memorandum refers to communication relating to the Pasmingo Cockle Creek Smelter containment cell cap design modification. On 01 March 2012, you forwarded us the following memorandums:

- A memorandum from the Contaminated Site Auditor for the site, Mr Graeme Nyland of Environ, dated 24 February 2012 and titled: Pasmingo Cockle Creek Remediation (06\_0184 Mod 3); and
- A memorandum from Chris Baker of Lake Macquarie City Council (LMCC), dated 10 February 2012 and titled: Pasmingo Cockle Creek Remediation (06\_0184 Mod 3).

We note that Mr Graeme Nyland of Environ does not make specific queries relating to the containment cell design modification.

LMCC requires the inclusion of work method statements for breaching the proposed containment cell capping layer. Golder can include the preparation of such work method statements as part of the preparation of a Containment Cell Integrity Management Plan, which is required by the Project Approval (application 06\_0184).

Further queries by Council relate to landscaping, which we understand will be addressed by others in consultation with Golder. We understand that Pasmingo Cockle Creek Smelter Services will provide a survey of the extent of the area capped with a geomembrane liner, as requested by LMCC.

Please do not hesitate to contact the undersigned, should you have any queries.



Daniel Dohle  
Senior Waste Management Engineer



Dr Gary Schmertmann  
Associate

DD/GRS/df

\\syd1-s-file02\jobs\06proj\051-100\06623099\_pasmingo\_remediation\_cockle creek\deliverables\06623099\_718\_m\_rev0 cap redesign dopi query.docx



"C"

**Section 75W Modification**  
**Proposed Amendments to Project Approval 06\_0184**

**Description of Proposed Modification**

The section 75W application seeks approval in respect of:

*'Changes to the approved containment cell design comprising:*

- *use of a composite liner (ie, geomembrane combine with 100mm thick layer of compacted clay) on the barrier layer;*
- *use of a geosynthetic drainage system in areas where a composite line is used; and*
- *flattening of the gradient of the slope from 3% to 2% on the top deck'.*

**Amendments to Approval Conditions**

The Applicant proposes the below amendments to Project Approval 06\_0184.

1. Delete all references to 'DECCW' from the definitions list and replace with:  
*'OEH Office of Environment and Heritage'*
2. Replace all references to 'DECCW' with 'OEH'.
3. Replace condition 1.1e) with the following and insert after:  
*'e) modification application 06\_0184 MOD 3, comprising:*
  - *letter from Minter Ellison to Director-General, NSW Department of Planning and Infrastructure, dated 16 December 2011; and*
  - *request to modify major project and political donations disclosure statement, dated 15 December 2011.**f) document titled Pasmaenco Cockle Creek Smelter: Proposed Design Changes for Containment Cell Cap, prepared by Golder Associates, dated 15 December 2011.*  
*g) the conditions of this approval'.*
4. Replace the following figure within condition 3.1c):  
*'1,200,000 m<sup>3</sup>' with '1,400,000 m<sup>3</sup>'.*
5. Replace condition 3.11 with the following:  
*'3.11 All materials used in the cap of the containment cell(s) shall be VENM or those materials specified in the document titled Pasmaenco Cockle Creek Smelter: Proposed Design Changes for Containment Cell Cap, prepared by Golder Associates and dated 15 December 2011, unless otherwise approved by OEH'.*

6. Insert after condition 3.11 the following:

- 3.12 The Proponent shall prepare a scaled site survey plan of the containment cell which accurately identifies and delineates both the existing 600mm and proposed composite capping layer on completion, at least one month prior to completion of the remediation of the site.*
- 3.13 A schedule of approved plant species is to be provided in, or attached to the Containment Cell Environmental Management Plan, prepared in accordance with conditions 8.6 and 8.7 of the Approval, for future landscaping of the site (in case any landscaping is contemplated), or alternatively, is addressed by the auditor who may require future approval of a qualified horticulturalist prior to planting'.*