

## ITEM 3 KORRONGULLA SWAMP

Port Kembla Copper Properties (PKCP) are the register owners of land at Lot 1 DP 653310 and Lot 2 DP 773067, Primbee known as Korrongulla Swamp. The site was used for the placement of copper slag being a by-product of the Port Kembla Copper Smelter. Following closure of the Copper Smelter in 2003, the landowner developed a Closure and Exit Strategy for the slag emplacement site which contemplated transfer of the land to Council.

The possible transfer of land was considered by Council at its meeting held July 2013. Council endorsed the closure approach including land dedication subject to site remediation to a condition that did not pose a risk to current and future users and occupants of the site and surrounding properties including the health of Lake Illawarra and that supported appropriate community use of the site.

A draft Remedial Action Plan (RAP), incorporating a Landfill Closure Plan and an appended Environmental Management Plan (EMP) has been submitted to Council to advance the proposed land transfer. An independent EPA-Accredited Site Auditor has been engaged to review and validate the site remediation process. Council has also engaged a land contamination expert to assist with site remediation and possible land transfer considerations.

This report provides an update regarding the above, potential land use for the site and the long-term management obligations. Given the public health risks, limited community benefit, the ongoing liability of the site, limited strategic value and costs associated with management, Council officers are unsupportive of the land transfer.

### RECOMMENDATION

- 1 That Council not proceed further with the proposed land transfer negotiations for Korrongulla Swamp, Primbee (Lot 1 DP 653310 and Lot 2 DP 773067) due to -
  - a) Public and environmental health and safety risks associated with the lands and
  - b) It would not provide for appropriate community use and benefit.
- 2 Port Kembla Copper Properties be advised that Council is not willing to accept the lands.

### REPORT AUTHORISATIONS

Report of: Chris Stewart, Manager City Strategy

Authorised by: Linda Davis, Director Planning + Environment - Future City + Neighbourhoods

### ATTACHMENTS

- 1 Brief timeline of events relating to Korrongulla land transfer

### BACKGROUND

Electrolytic Refining and Smelting Company of Australia Pty Ltd obtained development consent (DA-1982/539) from the NSW Land and Environment Court on 13 September 1983 to extract up to 1.5 million tonnes of sand and emplace 3 million tonnes of copper slag at the 12.8 hectares Korrongulla Swamp site.

Following the sand extraction that occurred between 1987 and 2002, approximately 600,000 tonnes of slag was emplaced at the site, ceasing in 2003 following the closure of the copper smelter at Port Kembla. The emplacement is regulated by the NSW Environment Protection Authority (EPA) under Environment Protection Licence (EPL) no. 2509.

Large areas of the slag have been capped with a layer of virgin excavated natural material (VENM) varying in thickness, however areas of exposed slag still exist on the site.

The dredge pond formed by the sand extraction is the dominant feature of the site, covering an area of around 6 hectares. Water quality in the pond exceeds the adopted water quality criteria for protection of aquatic ecosystems and recreational use (human health) for metals and nutrients.

The site is adjacent to the Council-owned Korrongulla Wetlands (Lot 1 DP 773067, 8.5 hectares), an annex of Wollongong Botanic Gardens which is managed as a publicly accessible nature reserve, dedicated to Council in 1987. Both the Council-owned wetlands and the swamp are zoned E2 – Environmental Conservation. The Council owned wetland is classified as community land and categorised as an area of cultural significance.

An aerial view of the site is provided in Figure 1 below and a brief timeline of key events associated with the site and transfer process is provided as Attachment 1 to this report.



Figure 1. Aerial image of Korrongulla Swamp

The Closure and Exit Strategy for the former slag emplacement site was reported to Council on 22 July 2013 in draft format, prior to being publicly exhibited. Following consideration of the report, Council resolved (in part):

*Council endorse the closure approach which includes the dedication of the land to Council after (and only if) it has been remediated to a condition which is unlikely to pose a risk to current and future users and occupants of the site and surrounding properties, including the environmental health of the groundwater and Lake Illawarra.*

Council has engaged with PKCP in good faith over a number of years consistent with this Council resolution. In accordance with the Closure and Exit Strategy a draft RAP incorporating a Landfill Closure Plan and an appended EMP have been prepared by PKCP. PKCP have engaged an EPA-Accredited Site Auditor to review the RAP/EMP and issue a Section B Site Audit Statement, which will determine:

- if the nature and extent of contamination has been appropriately determined,
- if the previous contamination investigations and RAP/EMP are appropriate for their stated purposes, and
- if the land can be made suitable for a particular use (or uses) if the site is remediated and managed in accordance with the RAP/EMP.

The Section B Site Audit Statement will be issued following finalisation of the RAP/EMP and prior to remediation works commencing. A key issue to note is that the draft RAP/EMP does not propose any long-term monitoring of ground water or surface water on the basis that the metal contamination and concentrations of nutrients on site are lower than the background contamination of the broader area. The Site Auditor will determine whether this position is accurate as part of their assessment.

The implementation of the RAP, which involves the installation of a capping layer and revegetation works, is the responsibility of PKCP. The end land use proposed in the draft RAP is wetland

reserve/passive open space with restricted access. This assumption differs from the open space use of recreation areas or environmental facilities proposed in the Closure and Exit Strategy and that underpinned Council's 2013 resolution. The RAP notes that following a decision by Council on the desired final land use and landform, more detail would be provided in the form of a Technical Specification for the remediation works and a Landscaping and Revegetation Plan.

It should be noted that the draft EMP developed by PKCP also contemplates restricted access to the site. If land transfer to Council occurs the in-perpetuity implementation of the EMP would be the responsibility of Council. Actions currently detailed in the EMP include:

- inspections of the capping layer on a quarterly basis (note inspections will be required more frequently if cap repair is required),
- installation and maintenance of signage around the water body,
- maintenance of site fencing and repair of the capping layer (including revegetation and follow up monitoring) as required and
- regular reviews of the EMP to monitor their effectiveness in managing the site.

Currently these management actions are not costed in the EMP. In addition, there are some site management actions that, in Council officer's opinion, have been omitted such as; weed management and replacement planting and potentially other management actions which are dependent upon final land use.

In September 2018, Council engaged the services of a contamination consultant to review the information prepared to date and provide recommendations on feasible land use options for the site. The Contaminated Land Investigation Report - Korrongulla Slag Emplacement Area (SMEC, 2018) was the result of this process.

The report concluded that both open space restricted and non-restricted land use options are generally technically feasible within the confines of the site condition (e.g. no access to the water body). From a risk management perspective, the water body presents a significant public health risk due to contaminants and the potential for drowning.

The report also provided a series of recommendations for Council to consider in any land transfer negotiations such as the need for an ecological and health risk assessment, post-capping monitoring and validation of the groundwater and surface water, engineering of the cap and community consultation regarding groundwater use restrictions.

The SMEC (2018) report recommends a number of issues to be resolved prior to transfer and conditions of transfer, most notably:

- Sufficient funding to be negotiated with PKCP in accordance with the Closure and Exit Strategy and including a risk based contingency allocation
- The Site Auditor considers and confirms that there are no long-term environmental implications from the pond being left open to the local ecosystem, site users or adjacent residents.

These issues have been raised with PKCP as has the limited community benefit of the site if public access is restricted. To inform Council's decision making, PKCP is willing to fund the development of a concept plan including landscape site analysis and a visual depiction of the open space opportunities for the site. It is estimated that this exercise will cost \$20,000.

## PROPOSAL

The subject site is highly constrained due to contamination issues.

The July 2013 Council resolution contemplates land dedication subject to appropriate remediation and risk amelioration having regard to current and future uses and occupants of the site.

In December 2018, Council received a report on an investigation into potential land uses for the site (SMEC, 2018). The report found that both restricted and unrestricted open space land uses were feasible for the site, however the large water body on site continued to present an environmental and public health risk.

Based on current information Council staff are unsupportive of the land transfer for the following reasons:

- Public health and safety risks associated with contamination and the large waterbody;
  - the presence of heavy metals and other pollutants on site
  - water quality indicators that exceed ecosystem and human health criteria
  - steep embankments around the waterbody and significant depths (up to 16m)
- Limited community benefit of the site;
  - recreational use would feasibly be restricted to the ~3.5 hectares at the north of the site, which severely limits opportunity for passive recreational pursuits/ infrastructure
  - a DA would be required to allow access to the site from Primbee bypass
  - planting is restricted to species with relatively shallow root systems due to the capping on site (ie no trees)
  - Council staff have determined that there is no current need for additional public space or recreational facilities relevant to this locality.
- Costs associated with future management;
  - Council would be responsible for in-perpetuity management of the site,
  - Council would require associated funds and resources (see financial section below for further information).
- Ongoing liability for Council associated with;
  - Any change in the nature of the contamination at the site
  - Potential changes in environmental conditions, such as off-site migration of contamination
  - Potential changes to the regulatory environment
  - Breaches in the capping.

Based on the above it is recommended that Council not proceed further with the land transfer negotiations and PKCP be advised that Council is not willing to accept the lands.

## CONSULTATION AND COMMUNICATION

Discussions have been held with staff across the following divisions:

- Open Space and Environmental Services – to determine cost estimates and other requirements for potential future management
- Property and Recreation Services – to investigate potential recreational opportunities
- Legal Services – to obtain advice on Council obligations and risks
- Governance and risk – risk management.

## PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2028 Goal 5: We have a healthy community in a liveable city. It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2018-2022	Operational Plan 2020-21
Strategy	4 Year Action	Operational Plan Actions
5.1.1 We work in partnership to build on opportunities to strengthen vulnerable communities	5.1.1.2 Continue to undertake social, land use and environmental planning activities that assists in service planning	Work with Port Kembla Copper and EPA regarding proposed transfer of the Korrongulla emplacement site to Council

## SUSTAINABILITY IMPLICATIONS

The site is located directly adjacent to the Korrongulla Wetlands; Botanic Gardens Annex which comprises a number of threatened vegetation communities. However, the Ecological Baseline Assessment report (Grant Fleming Environmental, 2012) prepared for the site found that no extant remnant vegetation communities occur on site, the site is dominated by weed species and classified as highly modified.

Feasibility to undertake re-creation of vegetation communities and extend the annex is constrained by the cap. Only species with shallow root systems would be appropriate for planting on site, therefore tree species would be ineligible.

With regard to fauna, according to the assessment report (Grant Fleming Environmental, 2012) the following noteworthy species have been recorded on site:

- Two bird species, *Ixobrychus flavicollis* (black bittern) and *Petroica rodinogaster* (pink robin), listed as vulnerable under the *Biodiversity Conservation Act 2016*
- One bird species, *Gallinago hardwickii* (Latham's Snipe or Japanese Snipe), listed as a Marine and Migratory species under the *Environment Protection and Biodiversity Conservation Act 1999*
- Two bird species, *Phalacrocorax melanoleucos* (little pied cormorant) and *Phalacrocorax varius* (pied cormorant) for which the site is one of three major regional breeding sites
- Four species of frogs, *Crinia signifera* (Common Eastern Froglet), *Limnodynastes peronii* (brown striped frog) *Litoria aurea* (green and golden bell frog) and *Litoria dentata* (bleating tree frog), one of which is listed as endangered under the *Biodiversity Conservation Act 2016* and vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*.

## RISK MANAGEMENT

If Council determines to accept transfer of the land there will be a requirement for resources to undertake long-term management of the site under the EMP, including associated funding.

Moreover, given the contamination present, the site may present a significant liability for Council and be a source of community concern. It is possible that further mitigation works may be required in the future if a change in the nature of the contamination at the site is identified, or a significant change in environmental conditions or the regulatory environment occurs. If Council resolves to accept the transfer, it should do so on the assumed basis that once it becomes the legal owner of the land, it will be responsible for any issues arising on, or emanating from, the land. Therefore, any land transfer must be conditional upon receipt of upfront funding and bond security from PKCP which is estimated to be sufficient to cover mitigation works and contingencies for risks which may be required in the future.

Should Council not proceed with the land transfer, the future ownership and land use of the site is uncertain. Any future use of the site would have to be consistent with the current zoning. The E2 zoning permits the following uses: Environmental facilities; Environment protection works; Extensive agriculture; and Recreation areas. Based on the existing zoning, recreation areas or environmental facilities are



considered the most likely future uses for the site following rehabilitation by the applicant as required under their consent (DA-1982/539).

Based on advice from various consultants it is understood that materials on site are relatively stable at the moment and any significant development or site disturbance should be avoided. Consequently future development is unlikely to be supported. The most appropriate use of site is as a natural area, noting however that vegetation restoration works will be limited due to the constraint posed by the capping.

## FINANCIAL IMPLICATIONS

As mentioned above, if transfer of land occurs the in-perpetuity implementation of the EMP would be Council's responsibility. Funding for delivery of EMP and a bond will need to be negotiated in association with any land transfer.

Council currently holds \$535,000 in cash bonds paid by PKCP as part of the original DA. The draft RAP states that PKCP propose that Council retain this money following the transfer of ownership of the site to fund contingency measures and presumably the implementation of the EMP. The Contaminated Land Investigation Report has made recommendations to ensure PKCP bear as much of the cost of the remediation of the site as possible prior to any land transfer.

Ongoing management of the site under the auspice of an EMP is expected to exceed the funds currently held in cash bonds. Should Council proceed with the transfer Council staff would seek to obtain a sufficient lump sum to provide for works over 20+ years as a condition of land transfer. Contingency funds to cover impacts due to unknown future contamination issues would also be sought through this process. It is foreseeable that Council may not be able to reach an agreement with PKCP in regards to funding arrangements.

## CONCLUSION

PKCP currently propose to transfer ownership of the Korrongulla Swamp site at Primbee (Lot 1 DP 653310 and Lot 2 DP 773067) to Council and are seeking Council concurrence. The site has been historically used as a copper slag emplacement and the future use of the site is feasibly limited to open space restricted or unrestricted access, albeit with limited recreational opportunities due to the contamination of the site and risk associated the large water body.

PKCP are offering to prepare a concept plan for the site in order to help Council understand opportunities for community benefit potentially associated with an unrestricted use of the site. Prior to encouraging PKCP to invest in this exercise it is appropriate that a decision be made by Council regarding their appetite to continue with the land transfer negotiations.

The site has significant public and environmental health and safety risks associated with the copper slag emplacement and large waterbody on site. The potential future community benefit of the site is considered to be limited. It is therefore recommended that Council not proceed further with the land transfer negotiations, and PKCP be advised that Council is not willing to accept the lands.

## Brief timeline of events relating to Korrongulla land transfer

- 13 September 1985 – NSW Land and Environment Court issued development consent to Electrolytic Refining and Smelting Company of Australia Pty Ltd (now Port Kembla Copper Properties Pty Ltd – PKCP) to extract up to 1.5 million tonnes of sand and emplace 3 million tonnes of copper slag
- 1987-2002 – Dredging of sand at the site
- 1992-1995 – Emplacement of 300,000 tonnes of copper slag at the site
- 2000-2003 – Emplacement of 300,000 tonnes of copper slag at the site
- 2003 – Closure of copper smelter
- 22 July 2013 – Draft Closure and Exit Strategy (Golder and Associates) (prepared on behalf of PKCP) reported to Council
- 27 March 2014 – Closure and Exit Strategy finalised, strategy states that the site will be remediated under the auspice of a Remedial Action Plan (RAP) and will be managed in the long term through an Environmental Management Plan (EMP)
- 1 May 2018 – Council receives revised draft RAP and Landfill Closure Plan and appended EMP (Senversa, 2018) (prepared on behalf of PKCP) for comment
- May 2018 to present – Ongoing discussions with PKCP and internal review