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20108 ADV Aon Ari Penrith Rev1 Feb21

8 February 2021

John Joannou
Aon Ari Property Fund
Level 36, 1 Farrer Place
Sydney NSW
2000

Via email: john@joannou.com.au

Dear John,

Re: Site Contamination Status - 2115 Castlereagh Road, Penrith, New South Wales

1 Introduction

Zoic Environmental Pty Ltd (Zoic) was engaged by Aon Ari Property Fund (the client) to provide an overview of the contamination status at 2115 Castlereagh Road, Penrith, New South Wales (the site). The site comprises an area of approximately 12ha and is legally defined as Lot 2 of DP787827.

Relevant background information is discussed below, along with an overview of the current site contamination status and associated management requirements. This letter is based on information detailed in the following documents prepared for the site:

- Remediation Review Report, Ventia Utility Services Pty Ltd, October 2017.
- Long-Term Environmental Management Plan (LTEMP), Ramboll, November 2019.
- Phase 1 and Indicative Phase 2 Assessment (Soil), WSP, December 2019.
- Human Health Risk Assessment, Environmental Risk Sciences Pty Ltd, March 2017 (as reported in the LTEMP).
- Ongoing Maintenance Order, NSW EPA, January 2020.

The site layout is shown on Figure 1 of Attachment A.

2 Background

Site History and Groundwater Investigation

The site comprises an industrial property which has historically been used by Crane Enfield Metals Pty Limited (CEM) for manufacturing copper tube products (under environmental protection licence 1098). Previous investigations conducted at the site identified soil and groundwater contaminated with chlorinated hydrocarbons including trichloroethene (TCE), dichloroethane and vinyl chloride, which had been used in a vapour degreasing unit (VDU), and

associated infrastructure, onsite to clean copper tube (see Figure 1). Groundwater assessment completed in 1998 indicated that the contaminant plume was approximately 800-1000 m in length and discharged through a permeable aquifer into the Nepean River.

The site was voluntarily notified to the NSW Environmental Protection Authority (the EPA) in 1999 under the Contaminated Land Management Act 1997 (the Act) and was subsequently identified as "significantly contaminated". The property was declared to be a remediation site under the Act in 2006.

Voluntary Management and Remediation

Remediation commenced at the site in 2007, with the operation of an on-site groundwater treatment plant (GTP). Fulltime operation of soil vapour extraction (SVE) was commenced in 2013, with two previous trials in 2007 and 2010.

A voluntary management plan (20091704) was issued by the EPA in 2009 relating to the identified contamination issues at the site. A Remediation Action Plan (RAP) was subsequently developed for the site by Environ Australia Pty Ltd in 2009 (which was updated in 2015 by Ramboll). The RAP incorporated a Voluntary Management Proposal (VMP), with the primary objective to remove the on-site source of contamination, particularly the dense non-aqueous phase liquids, through continued GTP.

The specific objectives of the VMP were to achieve the following:

- Interim Remediation Goal (IRG) – source removal by active remediation of Total Chlorinated Hydrocarbons (TCHs) at the site boundary to 1 mg/L or Point of Diminishing Returns, provided the Point of Diminishing Returns is less than 3.3 mg/L.
- Long Term Remediation Goal (LTRG) – Restoration of natural background water quality and relevant environmental values by monitored natural attenuation. The relevant environmental values are protection of aquatic ecosystems and drinking water.

Site remediation continued until amendment of the VMP in 2015, as discussed below. Copper tube manufacturing ceased in late 2014 and the VDU, associated storage tanks, equipment and bund were dismantled and removed by mid-2015.

Amendment of the VMP

From November 2015 the GTP was stated to be only removing negligible solvent from the groundwater and was determined to be at a point of diminishing returns (Ramboll 2019). The VMP was subsequently amended to focus on addressing immediate risks to health and the environment, with the LTRG objective removed. GTP and SVE procedures were subsequently ceased in 2015 with agreement from the EPA, which allowed for enhanced bioremediation trials to begin and rebound monitoring to occur. The VMP was most recently amended in 2018 to detail additional milestones relating to restriction of water abstraction, groundwater monitoring requirements, and completion of a Human Health and Environmental Risk Assessment (discussed below).

Validation Monitoring

Validation monitoring was completed at the site in 2017, with the associated Remediation Review Report (Ventia 2017) concluding that:

- TCE concentrations in boundary wells were below the lower bound remediation goal of 1 mg/L;
- Point of diminishing return of TCH less than 3.3 mg/L had been reached; and

- Reducing TCE concentrations, and presence of by-products, indicated that natural attenuation was occurring and will continue to occur at the site.

Potential site receptors under current configuration of the site and surrounds were identified in the Ventia (2017) report, including site workers, intrusive construction and maintenance workers, underlying groundwater, and surface water within the Nepean River.

Human Health Risk Assessment

Information in the LTEMP (Ramboll 2019) indicates that a Human Health Risk Assessment (HHRA) was completed at the site in March 2017, which concluded the following based on the current configuration of the site and surrounds:

- Risk to site workers in the main building and intrusive workers at the site were low and acceptable.
- Risk to workers in a smaller room constructed temporarily in the most impacted area of the slab were acceptable assuming general ventilation compliance for commercial / industrial buildings.
- Risks to recreational users who may be exposed to surface waters in the Nepean River or the stormwater drain were low and acceptable.
- Risk to site occupants, site workers and intrusive workers, on the adjacent site and west of Castlereagh Road were low and acceptable.

Soil Assessment

A Soil Assessment (WSP 2019) was completed at the site in 2019, including 40 borehole locations. Noting ongoing groundwater management requirements at the site, the assessment concluded that the site was suitable for ongoing commercial / industrial land use in its current configuration (based on soil data).

Ongoing Maintenance Order

An Ongoing Maintenance Order for the site was issued by the EPA in January 2020, on completion of site procedures required under the VMP. Requirements of the Ongoing Maintenance Order are discussed in Section 4 below.

3 Current Site Contamination Status

The most recent reported round of monitoring was completed on 30 November 2020, which showed a generally continuing trend of decreasing total TCE concentrations, with all monitoring wells reporting concentrations below the lower bound remediation goal of 1 mg/L. One off-site monitoring well reported a minor exceedance of this concentration (1.14 mg/L). The indicative plume extent based on 2018 groundwater monitoring data is provided in Attachment A.

A rebound of contaminant concentrations has not occurred in boundary and down-gradient monitoring wells since ceasing the remediation systems discussed above. Natural attenuation of contaminant levels in groundwater is considered to be continuing at the site based on decreasing TCE concentrations, and the presence of relevant by-products (DCE and vinyl chloride).

Should the site layout be modified, reassessment of potential exposure risk would be required.

Ongoing Maintenance Order

An Ongoing Maintenance Order for the site was issued by the EPA in January 2020, conforming completion of site works required under the VMP. Ongoing requirements include:

- Implement the groundwater monitoring outlined in the LTEMP (Ramboll 2019).
- Maintain the integrity of the groundwater monitoring wells named in the order for the purposes of ongoing monitoring.
- Report to the EPA as soon as practicable any incident that may adversely affect the monitoring program or cause migration of contaminants to the environment.
- Submit to the EPA annually, due by 30 November each year, a written report of compliance with the Notice detailing any instances of non-compliance and including the results of water quality monitoring. The was initial round of groundwater monitoring was completed in November 2020.

The monitoring is required to be undertaken over the next five years with the objective to demonstrate ongoing downward trends in contaminant concentrations in the groundwater.

Restriction on Groundwater Extraction

Ramboll (2019) states that in August 2018, correspondence was received from the Manager Water Assessments, NSW Department of Industry, Lands and Water confirmed that the site is managed under clause 40 of Part 9 of the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011* which will prevent new groundwater wells being approved and restriction of abstraction of groundwater for drinking in the downgradient area adjacent to the site.

4 Conclusion

Based on the information reviewed and discussed in this letter, the NSW EPA determined in 2006 that the land contamination at 2115 Castlereagh St Penrith was significant enough to warrant regulation under the Contaminated Land Management Act (1997). The land was declared a Remediation Site and a Voluntary Remediation Proposal (VMP) was subsequently agreed to. Remediation works in accordance with the VMP were conducted.

In January 2020, the NSW EPA agreed that the VMP objectives had been met. The NSW EPA was also satisfied that the contamination of the land was no longer significant enough to warrant regulation under the CLM Act. This meant that concentrations of contamination at the site did not present an unacceptable risk to human health or any other aspect of the environment, for the approved use of the site for commercial / industrial purposes. The VMP and the declaration ceased to be in force from this time.

Any ongoing requirements for the site with respect to residual site contamination are detailed in a site Long Term Environmental Management Plan (LTEMP) prepared by Ramboll in 2019, which has been endorsed by the NSW EPA. Provided the requirements of the LTEMP are followed and the groundwater contamination does not show any adverse change, there is no requirement to advise the EPA or engage an NSW EPA Contaminated Land Site Auditor

Should you have any queries or wish to discuss any points, please do not hesitate to contact the undersigned.

Yours sincerely,

Tyler Creese
Senior Environmental Consultant
Zoic Environmental Pty Ltd

Peter Moore
Principal Engineer CEnvP Site Contamination
Zoic Environmental Pty Ltd

Attachments: Attachment A - Site Layout and Plume Extent Figure

Limitations

This report has been prepared for use by the Client who commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the Client and other parties. The findings of this report are based on the scope of work detailed. The report has been prepared specifically for the Client for the purposes of the commission, and use by any nominated third party in the agreement between Zoic and the Client. No warranties, express or implied, are offered to any third parties and no liability will be accepted for use or interpretation of this report by any third party (other than where specifically nominated in an agreement with the Client).

This report relates to only this project and all results, conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose. This report should not be reproduced without prior approval by the Client, or amended in any way without prior approval by Zoic.

Subject to the scope of work, Zoic's assessment was limited strictly to identifying typical environmental conditions associated with the subject property area and does not include evaluation of any other issues.

Changes to the subsurface conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigation.

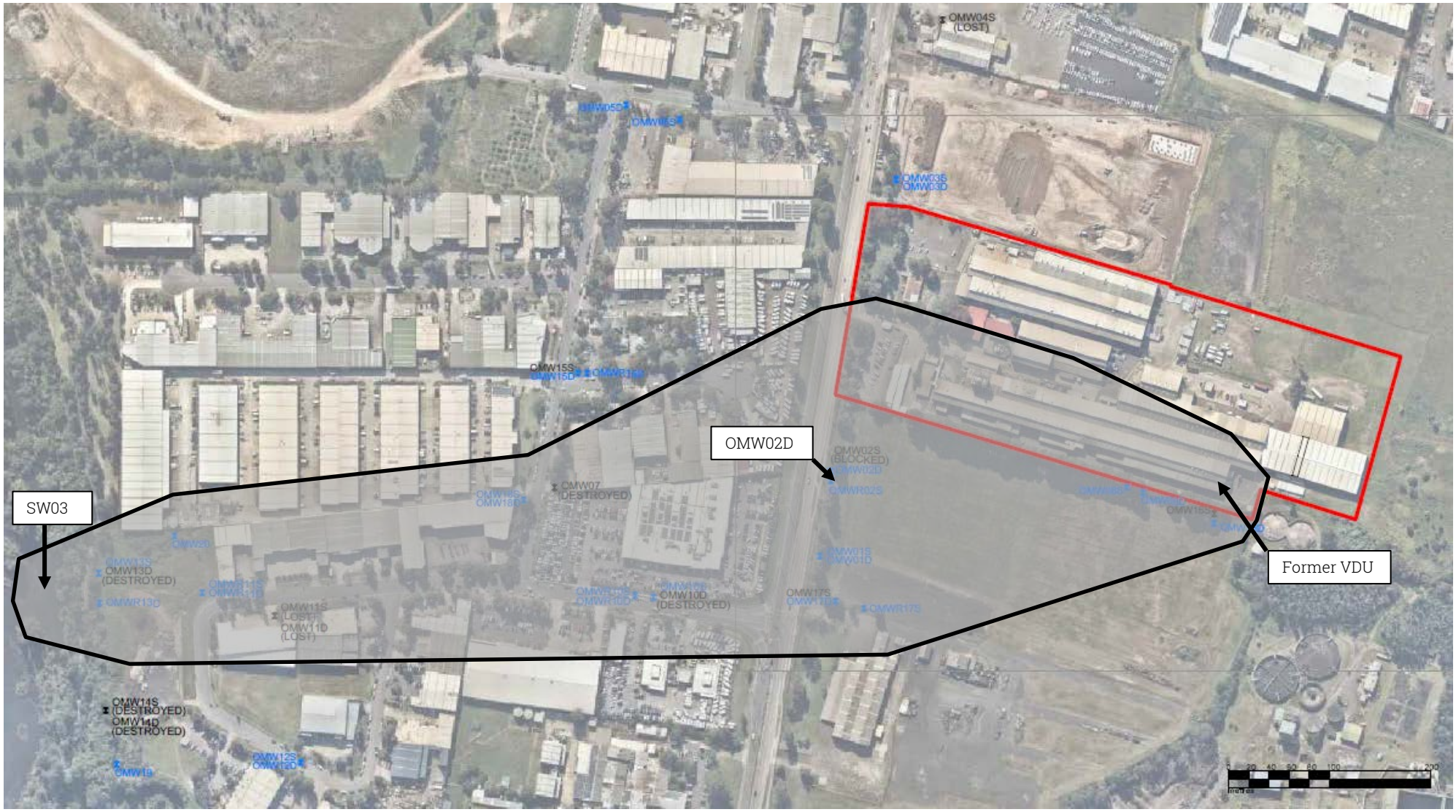
This report does not comment on any regulatory obligations based on the findings. This report relates only to the objectives stated and does not relate to any other work conducted for the Client.

The absence of any identified hazardous or toxic materials on the site should not be interpreted as a guarantee that such materials do not exist on the site.

All conclusions regarding the site are the professional opinions of the Zoic personnel involved with the project, subject to the qualifications made above. While normal assessments of data reliability have been made, Zoic assumes no responsibility or liability for errors in any data obtained from regulatory agencies, statements from sources outside of Zoic, or developments resulting from situations outside the scope of this project.

Zoic is not engaged in environmental assessment and reporting for the purpose of advertising sales promoting, or endorsement of any client interests, including raising investment capital, recommending investment decisions, or other publicity purposes. The Client acknowledges that this report is for its exclusive use.

Attachment A – Site Layout and Plume Extent Figure



LEGEND

Approximate site area

Approximate Plume Extent (2018 data)

This product has been created to support the main report and is not suitable for other purposes. Image sourced from Nearmap.

N

Scale indicative only

Figure 1: Site Layout and Plume Extent

Site Address: 2115 Castlereagh Road, Penrith NSW

Client: Aon Ari

Job Number: 20108

Date: July 2020