

2 October 2020

JC0612_LRES.01

Andrew Chown
Urban & Regional Planning Solutions
2/154 Fullarton Road,
Rose Park SA 5067
Via Email: andrew@urps.com.au

Dear Andrew,

RE: Stage 1 Peer Review Response – Croydon Park DPA

Introduction

Urban & Regional Planning Solutions (URPS) engaged Agon Environmental Pty Ltd (Agon) to provide responses to environmental-related comments as a result of a peer review of URPS' Development Plan Application (DPA) submission regarding the 14 land parcels/ allotments located on the corner of Regency and Day's Road, Croydon Park ('the site').

These allotments (see Table 1 and Figure 1) represent the extent of the DPA area which is being proposed to be rezoned from Light Industry into a mixed-use zone including accommodation for the future development of low to high density residential land use.

Please note that at this stage of the developmental process, specificity regarding developmental design including the location of future sensitive land uses is yet to be established (pending rezoning approval).

Agon's response is in relation to the review of the following document which was submitted as part of the DPA application:

- Agon (2019b) *Regency and Days Road, Proposed Croydon Park Rezoning Area – Summary of Environmental Condition*, 28 August 2019, JC0361_LSUM.01.

This report summarises the results of a range of soil and/ or groundwater investigations undertaken at the following site allotments:

- Lots G and H: Agon (2016a) *Detailed Site Investigation, Lots 111 & 114 DP 35388 Days Rd, Croydon Park*, 2 February 2016, JC0021/02;
- Lots I, J and K: Agon (2016b) *Environmental Site Investigation, 72 Days Road, Croydon Park, SA*, 29 April 2016, JC0057P/01;
- Lot N: Agon (2016c) *Environmental Site Investigation, 76 Days Road, Croydon Park, SA*, 29 April 2016, JC0057R/01; and
- Lots A, E, F, G and H Agon (2019a) *Detailed Site Investigation, Lots 2,3, 102, 111 and 114, Croydon Park*, 28 August 2019, JC0361_DSI.01b.

These reports were provided as attachments to the summary report submission and are understood to have also been reviewed during the DPA application process. Reports for Lots A, E to K and N represent 95% of the DPA area and the findings of which are representative of general conditions across the site.

The summary letter report also includes a limited desktop assessment undertaken for the remaining allotments within the DPA area (Lot B to D, M and N). These allotments represent the remaining 5% of the DPA area and were inaccessible at the time of the assessment (hence the approach).

Assessment Area

To assist in referencing allotments as discussed within this document, Agon the DPA area to be composed of the following 14 land parcels as summarised in Table 1 and Figure 1 below.

Table 1: Allotments within DPA Area

Lot ID	CT Volume / Folio	Allotment / Plan	Address	Approx. Area (Ha)
A	CT 5451/741	Lot 102 D22109	121 Regency Rd	4.705
B	CT 6128/46	Lot 1 F12126	141 Regency Rd	0.148
C	CT 5204/642	Lot 9 F11272	92 Days Rd	0.088
D	CT 5421/682	Lot 1 D32496	90 Days Rd	0.081
E	CT 5421/933	Lot 3 D32496	86-88 Days Rd	0.081
F	CT 5421/934	Lot 2 D32496	86-88 Days Rd	0.081
G	CT 6100/770	Lot 111 D35388	80-83 Days Rd	2.86
H	CT 6100/771	Lot 114 D35388	76-78 Days Rd	0.186
I	CT 5951/426	Lot 200 D65185	74 Days Rd	0.599
J*	CT 5951/435	Lot 209 D66244	26 Ena St	0.0529
K	CT 6129/140	Lot 202 D65185	76 Days Rd	2.053
L	CT 5795/482	Lot 33 F117915	70 Days Rd	0.082
M	CT 5390/495	Lot 32 F117914	68 Days Rd	0.072
N	CT 5402/300	Lot 29 F117911	72 Days Rd	0.981

*It is noted that Lot J is already zoned Residential

Agon's responses to environmental-related topics have been provided in Table 2 below.



Figure 1: Allotment Plan

Table 2: Agon Environmental Responses

Environmental Topic	Peer Review Comments	Agon's Responses
<p>12.Statement of Intent requirement</p>	<p>Section 6.2) As part of the SOI approval documentation, the Environment Protection Authority (EPA) requested two additional air emissions and site contamination investigations to form part of the investigations initiated to inform the DPA:</p> <p><i>Air Emissions</i> <i>'Noise and air emissions assessment of the proposed change of use of the subject land to ensure compliance with EPA requirements in light of the site's proximity to main roads and the relationship between the proposed retail activity and residential use'</i></p> <p>It appears that no air emissions assessment has been made as part of this DPA.</p> <p>[The above EPA requirement was forwarded by Tony Kamenjarin to Donna Ferretti on 31 January 2017, which Donna acknowledged on the same date.]</p>	<p>Noise and air emission testing (to demonstrate compliance to the rezoning requirements) did not form part of Agon's contracted assessment which focused on identifying chemical-based contamination in both soil and groundwater.</p> <p>URPS has advised on 29 September 2020 that this matter has been previously resolved and will not require a formal response as part of this submission.</p>
<p>19.Technical rigour of assessment</p>	<p>It is noted that additional investigations within various land parcels were undertaken in 2019 with the majority of allotments not exceeding Tier-1 of the site contamination assessment process (as prescribed within the EPA's Guidelines for the Assessment and Remediation of Site Contamination).</p> <p>It has however been noted that detailed soil and groundwater investigations have not been undertaken on all land parcels...the analysis provided by Agon Pty Ltd does not entirely satisfy the EPA requirements as all allotments have not been assessed.</p>	<p>As noted, allotments where an intrusive assessment has been previously undertaken include Allotments A, F to K and N where contaminant concentrations were generally below the adopted Tier-1 assessment criteria.</p> <p>Previous soil sampling and laboratory analysis represents 95% of the accessible DPA area whilst the former groundwater assessment was undertaken to appraise generalised groundwater conditions over a majority of the DPA area.</p> <p>Where site access/permission could not be provided, a limited desktop investigation was undertaken to appraise the following:</p> <ul style="list-style-type: none"> • Lots B, C and D form the north-east portion of the DPA area. These allotments were identified as potential sources of hydrocarbon-based impacts (based on the previous use of Lot B as a service station and Lot C & D for mechanics workshops). Potential impacts could also be derived from potential importation of fill (as with the rest of the DPA area). Analytical results from a well located adjacent to the east of Lot B (MW04) and soils observed and sampled adjacent to Lot B, C and D have not provided sufficient evidence to suggest that extensive impacts emanating across allotment boundaries from these land parcels were present at the time assessment; and • Lot L and M are occupied residential allotments to the south-east. Agon reported that there is a potential for pesticides to have been utilised within these allotments based on former agricultural use (as with most of the DPA area) and termiticide treatment within building extents. It is considered unlikely that significant contamination is present within these allotments based on the results of pesticide testing at adjacent allotments and the predominantly residential use (current and historical) of both allotments. <p>Noting that the assessment of the majority of the DPA area has not identified evidence for extensive contamination, Agon considers that the technical rigour applied to previous assessments are sufficient for the purposes of supporting the planned zoning amendment.</p> <p>Please note that Agon have not concluded that allotments that have not been subject to intrusive investigations will not pose potential detrimental environmental concerns or do not present the potential for site contamination.</p> <p>Agon's findings from the desktop assessments for these allotments were supported by further recommendations to undertake environmental investigation works to ascertain the implications of impacts associated with former land uses within Lot B to D, and L and M (noting the latter are currently occupied residential properties).</p> <p>We also note the formatting error on Section 2.1 of the latest DSI report (Agon, 2019a). This is not considered material for the purposes of the DPA, and the report can be amended for this error and resubmitted for URPS' records.</p>
<p>20.Historical land uses – 86-88 Days Rd</p>	<p>Some key information sources (for historical land uses) do not appear to have been utilised, such as:</p> <ul style="list-style-type: none"> • Historical trade directories e.g. the Sands and McDougall's directory https://images.slsa.sa.gov.au/almanacsanddirectories/1973sandsandmc/ • Historical newspapers e.g. the National Library of Australia 'Trove' site https://trove.nla.gov.au/newspaper/# <p>Using these sites, it is noted that the:</p> <ul style="list-style-type: none"> • 1973 Sands & McDougall directory records the presence of Footes Bus Services Ltd at 86-88 Days Road (land parcels E and F) • Advertiser newspaper of 25 January 1954 contains an advert requesting experienced bus drivers apply to Wilton and Foote (located at Days Road Service Station). <p>These sources indicate that part of the DPA site may have operated as a bus depot from the mid-1950s to the mid-1970s. The implications of this land use should be discussed in the Summary of Environmental Condition.</p>	<p>The ownership of this allotment by a bus proprietor was noted in the Agon (2019a) report (Section 3.1.2 and Appendix A). The presence of a bus depot within Allotment E and F (86-88 Days Road) may have resulted in potential impacts from the use of hydrocarbon-based chemicals (fuels and lubricants).</p> <p>Although the bus depot was not specifically identified as a potentially contaminating activity, Agon considered the impact of hydrocarbons from vehicles (fuels and lubricants) as a potential contaminant of concern within the DPA area including Lots E and F (as outlined in Table 5, Section 3.3 of the Agon 2019a report).</p> <p>Bores drilled within Lot E and F, which were located in the likely areas of bus parking and maintenance, did not indicate observable evidence of hydrocarbon impact to be present.</p> <p>Identification of the bus depot as a specific potentially contaminating land use does not materially change the overall finding of Agon's previous assessments and it is anticipated that this allotment will be subject to future assessments (following DPA approval), in line with Agon's recommendations. Further investigation of this allotment will ensure the sources nominated are included.</p>

Environmental Topic	Peer Review Comments	Agon's Responses
21. Potential contamination	(One) omission is a review of site plans or site observations in relation to the location, elevation and size of sewers, stormwater drains and underground utilities (such as communications infrastructure) that may assist in the identification of preferential contamination migratory pathways within the subsurface.	<p>Utility plans were reviewed during the underground services review process undertaken across the site which determined that most major services are located at adjacent off-site areas along Days and Croydon Roads. This excludes the stormwater alignment within Lot G which was previously identified in two previous investigations. Soil sampling locations adjacent this stormwater alignment did not provide observable or analytical evidence to suggest that this utility alignment was a preferential pathway for migration of contaminants.</p> <p>Agon does not consider the lack of detailed assessment of underground utilities within site bounds to be detrimental to the overall investigation. Agon's current soil sampling network is of sufficient density to enable identification of sources of extensive contamination including those sourced from underground utilities.</p> <p>Agon also notes that given the age and varied ownership of site developments, a detailed plan of internal services is not available for the DPA area. Development of such a plan may be possible during subsequent phases of the development or at such a time that the entirety of the site (including within building footprints) can be accessed.</p>
22. Historical land uses – 141 Regency Rd	Agon have indicated that it is likely that land parcel B was utilised as a service station. This could be confirmed with additional searches such online trade directories and local government enquiries (e.g. under Section 7 of the Land and Business (Sale and Conveyancing) Act 1994). It is noted that the 1973 Sands & McDougall trade directory records the presence of the BP Regency Road Service Station at 141 Regency Road (corner of Days Road and Regency Road).	<p>Agon has sufficient evidence from the limited scope undertaken to demonstrate that a service station was formerly in operation within Lot B. This includes historical evidence of BP's encumbrance at the site which is supported by visual confirmation of residual petroleum infrastructure within Lot B.</p> <p>Further investigation of this allotment will ensure the sources nominated are included.</p>
23. Adjoining land uses – 143 Regency Rd	It is noted that the 1973 Sands & McDougall trade directory records the presence of the Croydon Park Service Station at 143 Regency Road (approximately 50m east of the site). This historical use does not appear to be discussed in the report, but could represent a source of hydrocarbon contamination that may have migrated beneath the site such as via groundwater	<p>143 Regency Road is located down the inferred gradient from Lot B which is already identified as a potential hydrocarbon source (based on its previous use as a service station). The identification of further hydrocarbon sources does not impact Agon's findings, all of which are subject to recommendations of further assessment (likely following zoning approval).</p>
24. Site inspections of all parcels	Information on inspections of the majority of the land parcels is provided in the Agon documentation. Information on the current use of land parcels B, C, D, L and M is provided, however it is unclear if a detailed site inspection of these land parcels was undertaken as part of Agon's scope of works.	<p>Although not implicit in the report, limited visual inspections of Lot B, C, D, L and M were conducted (as part of other investigations). Please note that a detailed inspection of each allotment could not be undertaken due to access restrictions, further noting that lots L and M are occupied residential properties.</p> <p>Our limited inspection is supported by Agon's previous soil and groundwater investigations at adjacent locations of these allotments (namely in the north east of lot A, in lots E and F, and in the east of lot N. No groundwater impacts were identified, and only shallow impacts associated with fill have been observed in soils in these allotments. Confirming the environmental condition of allotments B, C, D, L and M through intrusive means will be confirmed through future recommended environmental assessments (pending zoning approval).</p> <p>Accordingly, Agon considers that the information collected to date is sufficient for the purposes of the DPA.</p>
25. Conceptual Site Model	A summary of the Conceptual Site Model for the entire site is not provided, which would have been useful to provide an understanding of the source, pathway, and receptor relationships for the entire site.	<p>Agon anticipates that an update of the Conceptual Site Model (CSM) will be undertaken following further assessment of areas yet to be sampled in detail, in accordance with the GAR and NEPM. We consider that the current CSM is representative of our findings.</p>
26. Sampling and Analysis Quality Plan [SAQP]	SAQPs are documented for the soil investigations undertaken by Agon at land parcels G, H, I, J, K and N in 2016, including Data Quality Objectives (DQOs) with a quality assurance (QA) plan and details of quality control samples to be collected. A SAQP for the soil and groundwater investigations undertaken with land parcels A, E, F, G and H in 2019 is not provided in the Agon report (although quality control and quality assurance procedures are documented).	<p>Agon's assessment is in keeping with the principles of previous SAQPs including the collection and analysis of quality control samples to demonstrate repeatability and validity of analytical results.</p> <p>Noting that the site was not under Audit during the 2019 assessment, Agon have instead focused on providing further technical value to support the planned rezoning amendment.</p>
27. Rigour of soil analytical suites	Some potential contaminants (identified from the site history evaluation) were not included in the soil analytical suites for all parts of the site. For example, organophosphorus pesticides were identified as potential contaminants resulting from agricultural activities in the central part of the site (land parcel G), but were not included in the soil analytical suite for samples from this area (even though an organochlorine pesticide was detected confirming impacts from agrochemicals in soils in this part of the site).	<p>Agon notes that the lack of OPP analysis as part of the pesticides screen utilised within Lot G. Please note historical agricultural use was identified within most of the DPA area. Where undertaken the following was reported regarding pesticides:</p> <ul style="list-style-type: none"> • Lot A and I soils were not identified with reportable concentrations of OCPs and OPPs; • Lot K soils were reported with detectable concentrations of OCPs (in the form of aldrin, dieldrin and chlordane) below the respective HIL A criteria. OPP analysis undertaken at these samples did not identify OPP compounds in excess of the laboratory LOR; • Lot N soils were reported with a single residual minor detection of OCP in the form of DDT at a concentration below the adopted HIL A criteria. OPP analysis undertaken within the same sample did report concentrations above the laboratory LOR. OPP analysis undertaken within other soil samples did not report concentrations in excess of the laboratory LOR. <p>As an overall assessment of areas previously utilised for agricultural purposes, pesticide results obtained to date do not indicate evidence of widespread or significant pesticide contamination. Analysis for OCPs was targeted over OPPs as use of these compounds was significantly more widespread and are more persistent in the environment. Noting that minimal pesticides residues (OCPs or OPPs) have been identified on site (and that OCP detection does not imply OPP use), Agon does not consider the lack of OPP testing within Lot G to be detrimental to the appropriate appraisal of potential pesticide impacts within the DPA zone.</p> <p>Given the results to date, the presence of pesticide residues at the site (OCP or OPP) are not considered to be a key driver that would limit the redevelopment of the site for residential purposes, or that would preclude the rezoning as proposed.</p>

Conclusion

Agon have reviewed the comments provided and consider that the level of assessment undertaken to date is sufficient for the purposes of the proposed Development Plan Amendment (DPA).

To date, all investigations have been targeted on providing information as to the presence of any significant or widespread areas of site contamination that would preclude the rezoning of the land for mixed uses (including residential use), rather than undertaking detailed investigations to confirm the current suitability of the site for these proposed uses.

The findings of the assessments to date have not identified any significant site contamination impacts that indicate the site could not be made suitable for the envisaged purposes (mixed use, including residential).

As previously stated, we concur that based on the findings of the previous assessments (or lack thereof, for some allotments), the site (both as a whole, and for specific allotments) will require further investigation. We acknowledge that for those areas planned for residential use, these investigations will need to be of sufficient detail and rigour to obtain a Site Contamination Audit Statement for relevant portions of the site. We have advised our clients that these further investigations will be necessary and have provided recommendations to address such aspects. However, until those areas are identified, it is considered that an appropriate level of investigation has been completed for the site for the purposes of supporting a DPA.

Based on the site data obtained to date, it is anticipated that any site contamination impacts detected on the site would be able to be mitigated by:

- a) Amending design of the development to avoid any areas of potential health risk; or
- b) Minimal remediation works to remove or prevent exposure to contaminated soil or groundwater; or
- c) A combination of the above.

Agon therefore anticipates that the level of detail requested by the review will be appropriately delivered by future works after the rezoning has been approved and the proponents of any development understand where specific land uses will be located within the site (i.e. at the DA stage). Such an approach will enable the targeting of future, more detailed works to specific areas of potential contamination, or where more sensitive land uses are proposed.

We trust that Agon's response is sufficient and meets your requirements. Please contact myself (0402 099 162) or David Probert (0402 474 480) should URPS require further support regarding environmental aspects of the DPA review process.

Kind Regards,



Carlo Echevarria

Senior Environmental Scientist