

29 August 2018

Sheelagh Laguna
Planner
NSW Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Laguna

Newcastle Gasworks (Clyde Street) Remediation Project SSD 16_7676 – Environmental Impact Statement

I refer to the Environmental Impact Statement (EIS) exhibited on the NSW Department of Planning & Environment web site in relation to the Newcastle Gasworks (Clyde Street) Remediation Project (the Project).

The Project involves the remediation of the Former Newcastle Gasworks site located at 1 Chatham Road (corner Clyde Street), Hamilton North, in the Newcastle Local Government Area. The Project area is contaminated with gasworks waste due to the former use of the site. Contaminants include polycyclic aromatic hydrocarbons (PAHs), benzene, total petroleum hydrocarbons (TPHs), arsenic and lead. The contaminants have degraded groundwater and are present at concentrations which exceed criteria for beneficial use and protection of aquatic ecosystems, and may also migrate off-site via Styx Creek to the Hunter River. In addition there is a risk from vapours which may be released during sub-surface works on the site.

The remediation includes demolition (except for two heritage listed buildings), crushing and screening, cut and fill, regrading of the site, installation of an approximately 510 metre long subterranean barrier wall to redirect groundwater flow around the areas of highest contamination, and a capping layer of bitumen spray seal. It is understood that the remediation is intended to fulfil the requirements of a Management Order issued by the Environment Protection Authority in December 2015, and any future redevelopment of the site would require a separate assessment and approval process.

The Project area is surrounded by a mixture of land uses which includes residential, educational, industrial and commercial premises in close proximity.

Hunter New England Population Health (HNE Health) has reviewed the EIS paying particular attention to the management of air quality, noise, water and issues which may have an impact on public health. The following issues could be considered in the approval process for this project.

Hunter New England Local Health District
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Air Quality

It is understood from the EIS and the Human Health Risk Assessment (HHRA) that the main potential health risk would be for workers undertaking sub-surface excavation. Worker health and safety is beyond the scope of NSW Health review, however, we would emphasise the need to take all necessary precautions to protect workers' health and safety in conjunction with advice from SafeWork NSW.

Noise

Remediation works are expected to take place over a 7 month period during standard construction hours Monday to Friday 7am to 6pm, and Saturday 8am – 1pm, with no work on Sundays or public holidays. Tables 4-4 and 4-6 predict a large number of exceedances of construction noise management levels in several noise catchment areas (NCAs 2, 5, 6, 8 & 9). In addition there are predicted to be exceedances of 'highly affected' levels at NCAs 5 & 6.

Table 5-2 sets out the mitigation measures for construction noise and vibration for the Project in order to minimise any adverse health effects on the surrounding community. The complaints management measures should include a mechanism that ensures remedial action would occur within an acceptable time-frame should problematic noise generation occur.

Groundwater

The Post-Remediation HHRA considered groundwater uses at premises in close proximity to the site for irrigation of home produce and filling swimming pools. The assessment found that potential exceedances of risk and hazard criteria have been estimated for future scenarios where groundwater is beneficially used at off-site adjoining properties. These exceedances include potential exposures to thiocyanates for each of the beneficial use scenarios assessed; and potential exposures to heavy TRH fractions and benzo(a)pyrene through potential ingestion of home grown produce as irrigated with groundwater.

The EIS states that there is currently one landholder bore authorised for domestic water supply within 500 metres of the site (GW058803, on Emerald St approximately 90m west of the proposed subterranean barrier wall). The EIS states that there is currently no beneficial use of groundwater occurring in proximity to the site, and therefore based on current groundwater uses, no potentially unacceptable risks or hazards for off-site users.

As there is one existing landholder bore, and beneficial uses of the water from that bore have potential to pose a health risk, it would be recommended that advice is provided to the landholder to ensure they are aware of this risk, and to advise what uses of the water would not pose a health risk. If there is any likelihood of future landholder bores in the area, this advice should be provided to all landholders for whom this risk applies to allow them to make an informed decision regarding installing a bore.

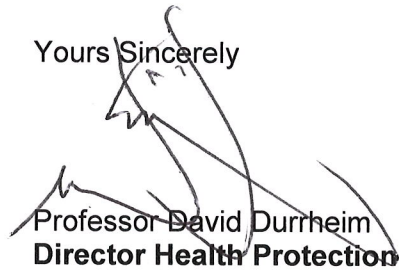
It is noted that post-remediation groundwater quality monitoring would occur at four off-site up gradient wells (MW17 to MW20) which are located along Emerald St. As the existing landholder bore is in this vicinity, it may be prudent to offer monitoring of this bore as part of the monitoring program.

Heat

The large area of bitumen capping could contribute greatly to heat generation in the local area. It is recommended that advice be sought from the Office of Environment and Heritage (OEH) on the potential impacts this may have on surrounding residences, and seek OEH recommendations for addressing this impact.

If you require any further information please telephone Carolyn Herlihy, Environmental Health Officer on 4924 6477.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'David Durrheim', is written over the printed name and title.

Professor David Durrheim
Director Health Protection
Hunter New England Population Health