

POLLUTION ABATEMENT NOTICE

No. 2018/01

(Issued pursuant to section 77 of the *Waste Management and Pollution Control Act*)

Issued to: Ronald Francis Streten and Marie Duchesne Streten

Address: 484 Gorge Road, Lansdowne

Postal Address: PO Box 302, Katherine NT 0851

In relation to premises: Lot 2302 NT Portion (000) also known as 484 Gorge Road, Lansdowne NT 0850

Reasons

I, Dr Paul Vogel, Chairman of the Northern Territory Environment Protection Authority (NT EPA) pursuant to Section 77 of the *Waste Management and Pollution Control Act* ("the Act"), believe on reasonable grounds that:

1. Ronald Francis Streten and Marie Duchesne Streten are the land owners for Lot 2302, NT Portion, commonly known as 484 Gorge Road, Lansdowne ("the premises");
2. NT EPA officers attended the premises on 30 October 2015 and observed approximately 1 hectare of the premises being used for the disposal of waste materials (now known as "the disposal area");
3. Your independent consultants report confirms the presence of wastes and estimates there to be 1600 cubic metres of waste disposed on the surface of the disposal area;
4. Surface wastes confirmed to be present in the disposal area include listed wastes (including tyres), whitegoods, tiles, green waste, concrete rubble, 44 gallon drums, Intermediate Bulk Containers (IBC), soils, putrescible household waste, building wastes and asbestos containing materials (ACM);
5. To date, the NT EPA has not been provided definitive quantification of any of the wastes buried within the disposal area;
6. There are no historic or current approvals, licences or authorisations issued under the Act for the disposal of wastes at the premises;
7. There are no relevant historic or current permits or approvals issued under the *Planning Act* for land filling, land reclamation or flood mitigation at the premises;
8. The premises is located approximately 500 metres from the Katherine River and close to the major water extraction point (Donkey Camp Weir) for the Katherine public water supply;
9. The premises has been subject to two Authorised Officer Directions dated 17 November 2015 and 26 April 2017 which have not been fully complied with;
10. The Authorised Officer Direction dated 17 November 2015 directed the securing of the premises to prevent further waste being deposited and buried and the removal of the waste to a licenced facility. The landowners secured the premises but did not remove the waste;
11. The Authorised Officer Direction dated 26 April 2017 directed that surface wastes were to be classified and quantified, that a plan be provided to the NT EPA detailing

the management, removal and appropriate disposal of all waste on the surface of the premises, and a timeframe to undertake an environmental risk assessment of the buried wastes at the premises;

12. A report titled *Waste Characterisation 484 Gorge Rd, Lansdowne, October 2017* (prepared by Greencap Limited) was provided to the NT EPA in October 2017. No plans to remove wastes or timeframes for further assessment of buried wastes have been provided;
13. The nature and extent of the wastes buried at the premises are unknown and have the potential for harm or risk of future harm or adverse impact on the environment, including impacting groundwater;
14. Action is now required at the premises in line with s79(1) (a), (c) and (d) of the Act;
15. Investigation and remediation works are required to reduce the risks to human health and the environment from the wastes at the premises; and
16. That the issuing of the Pollution Abatement Notice to achieve these outcomes is in accordance with the NT EPA Compliance and Enforcement Policy.

Requirements of Pollution Abatement Notice

Waste Management Requirements

1. By 1 August 2018, you must clear the disposal area of vegetation and remove from the disposal area all visible loose and accessible surface wastes, including but not limited to IBCs, steel, drums, timber, plastic, building and construction wastes, tyres and batteries;
2. All wastes removed from the premises must be taken to a licensed waste facility for disposal and if suitable for recycling;
3. All disposal or recycling receipts for waste removed from the premises must be retained for inspection by NT EPA officers;
4. All listed wastes removed from the premises must be transported by a licensed waste contractor and disposed of at a licenced waste facility;
5. All disposal receipts for listed wastes removed from the premises must be retained for inspection by NT EPA officers;
6. Due to the lack of knowledge of the nature of the wastes buried in the disposal area, lighting fires or the burning of any waste at the disposal area is explicitly prohibited;
7. You must ensure that all reasonable and practical measures are in place to prevent fires occurring within the disposal area and the surrounding area;
8. In the event, a fire does occur within the disposal area or impacts the disposal area, you must take all reasonable and practical measures and have the ability to control the fire;
9. The NT EPA must be notified as soon as practical after (and in any case within 24 hours after) any fire or environmental incident via its Pollution Hotline 1800 064 567;
10. By 31 August 2018, the surface of the disposal area must be contoured to prevent erosion of the disposal area and minimise ingress of rainwater or surface water into remaining surface and buried wastes;

11. By 31 August 2018, the surface of the disposal area must be and covered by a minimum of 300 mm of capping layer of certified Virgin Excavated Natural Material (VENM)¹ ;

Groundwater Bore Installation and Monitoring

12. By 1 August 2018, you must employ a suitably qualified person experienced in contaminated site investigations to install three (3) groundwater monitoring bores at locations suitable to monitor any groundwater impacts from the wastes disposed of at the premises;
13. One of the groundwater monitoring bores must be located up gradient of the disposal area and the two remaining groundwater monitoring bores must be located down gradient of the disposal area. The three groundwater monitoring must be installed in a triangular formation;
14. Prior to the installation of the groundwater monitoring bores referred to in requirement 12, the NT EPA must be notified via its Pollution Hotline 1800 064 567;
15. This Pollution Abatement Notice does not provide any permissions or authority to access or conduct works on land owned by other landowners. If the required groundwater monitoring bores are not to be located on your premises, you must obtain all relevant permissions from the relevant landowners;
16. You must obtain all relevant permits to install each groundwater monitoring bore from the Water Resources Division of the Department of Environment and Natural Resources (DENR);
17. All groundwater bores must be installed and operational by 31 August 2018;
18. You must maintain safe access to and integrity of all groundwater sampling bores at all times;
19. You must decommission all monitoring bores to the satisfaction of or requirements of the landowner and DENR within 90 days of receiving written confirmation of the completion of groundwater monitoring required by this PAN;
20. Starting from September 2018, sampling of all three groundwater monitoring bores must be taken by suitably qualified persons experienced in contaminated site investigations and then in February and September of each subsequent year, for an initial 3 year period (until February 2021)²;

Samples taken from monitoring bores must be analysed for parameters in accordance with *National Environmental Protection (Assessment of Site Contamination) Measures 1999 as amended* to address the risk to human health and the environment and must include:

- i. Per- and poly-fluoroalkyl substances (PFAS) – (28 analyte suite)
- ii. Alkalinity (as calcium carbonate)
- iii. Ammonia
- iv. Arsenic III & V
- v. Calcium
- vi. Chloride
- vii. Fluoride

¹ As defined in *Protection of the Environment Operations Act 1997* – Schedule 1

² Note: Further sampling may be required after this date;

- viii. Cadmium
- ix. Cobalt
- x. Copper
- xi. Chromium VI
- xii. Lead
- xiii. Mercury
- xiv. Zinc
- xv. Iron
- xvi. Magnesium
- xvii. Manganese
- xviii. Nitrate
- xix. Nitrite
- xx. Potassium
- xxi. Sodium
- xxii. Sulfate
- xxiii. Electrical conductivity (EC)
- xxiv. Temperature
- xxv. pH
- xxvi. Total Phenolics
- xxvii. Total Recoverable Hydrocarbons (TRH)
- xxviii. Benzene
- xxix. Toluene
- xxx. Ethylbenzene
- xxxi. Xylene
- xxxii. Polycyclic Aromatic Hydrocarbons (PAH)
- xxxiii. Polychlorinated Biphenyls (PCB)
- xxxiv. Organochlorine pesticides (OCP)
- xxxv. Organophosphate pesticides (OPP)

21. Quality Assurance and Quality Control for all groundwater sampling events must be undertaken in accordance with the requirements of the *National Environmental Protection (Assessment of Site Contamination) Measures 1999 as amended*;
22. Within one (1) month from the date of each groundwater sampling event, a report by a suitably qualified person experienced in contaminated site investigations must be submitted to the NT EPA detailing, but not limited to the sampling fieldwork undertaken, the groundwater monitoring results, groundwater data interpretation and an assessment of the potential risk to human health and the environment;

Reporting Requirements

23. By 30 September 2018, provide to the NT EPA a report from a suitably qualified person that must include but not be limited to:
 - a) surface remediation works undertaken at the premises;
 - b) confirmation that a 300mm capping layer has been installed using Virgin Excavated Natural Material only;
 - c) the destination, quantity and receipts of the waste removed from the premises for disposal and/or recycling;
 - d) receipts for the imported certified Virgin Excavated Natural Material for the premises; and

- e) details of the three monitoring bores installed at the premises including location, installer details and whether they will adequately monitor groundwater at the premises;

Additional Requirements

24. Within two years from the date when the disposal area at the premises or part of the premises containing the disposal area is either transferred, gifted, sold, subdivided, leased, sub-leased or exchanged, the new landowner or lessee of the land at the premises containing the disposal area must assess and remediate the disposal area in accordance with the *National Environmental Protection (Assessment of Site Contamination) Measures 1999 as amended* to determine whether the disposal area is fit for its current zoning land use and any future intended land use; and
25. On completion of any environmental remediation a qualified person, under section 68 of *Waste Management and Pollution Control Act*, must provide certification that the disposal area is suitable for its intended zoning land use(s). This certification must be provided to the Northern Territory Environment Protection Authority.

Notice Issued By:



Dr Paul Vogel
Chairman

NT Environment Protection Authority

21 / 05 / 18

Date

Time

Important Notice

Failure to comply with this notice is an offence under section 80 of the *Waste Management and Pollution Control Act* and may incur significant penalties and/or other statutory action.

This notice takes effect on the date on which it is served upon you. Pursuant to section 108 of the *Waste Management and Pollution Control Act*, **you have the right to apply for a review of the decision to issue you with this Pollution Abatement Notice. If you intend to apply for a review, YOU MUST MAKE AN APPLICATION NOT LATER THAN 7 DAYS after the date you were served with this notice.** For information on how to lodge an application for review, contact the Northern Territory Environment Protection Authority, telephone 8924 4041.

Pursuant to section 112 of the *Waste Management and Pollution Control Act* the person issued with this notice must fulfil certain obligations before selling, leasing, sub-leasing, giving or exchanging land, premises, a vehicle or business which is the subject of this Notice.