Notice

Environmental Protection Act 1994

Environmental Evaluation

Notice to conduct or commission an environmental evaluation

This notice to conduct or commission an environmental evaluation is issued by the administering authority pursuant to section 326B of the Environmental Protection Act 1994*.*

Robert C. Brooks and Jennifer A. Brooks (R. C. & J. A. Brooks)
212 Oakey Creek Road, CINNABAR QLD 4600.

Your reference: STAT1419

Our reference: EPPR00229113

Tuesday, 07 January 2020

Take notice: that under the *Environmental Protection Act 1994* (the Act) a notice to conduct or commission an environmental investigation is issued to R. C. & J. A. Brooks (you) by the administering authority. The administering authority is the Chief Executive of the Department of Environment and Science (the department).

The notice to conduct or commission an environmental investigation is issued in respect of the activities of R. C. & J. A. Brooks on land described as Lot 24 on SP178870 and Lot 8 on FY229, Jarvis Road, Wondai, (the premises).

A. Grounds

The notice to conduct or commission an environmental investigation is issued on the following grounds:

1. The department is satisfied, on reasonable grounds that an activity being carried out at the premises is causing or is likely to cause environmental harm.
2. Under section 326B of the Act, the department may give written notice (***an investigation notice***) requiring the person to conduct or commission an environmental investigation about an event or activity and submit an environmental report about the investigation to the department.

The facts and circumstances forming the basis for these grounds are:

1. You hold environmental authority (EA) EPPR00229113 (effective 3 June 2019) to carry out environmentally relevant activities (ERA's) 53 Organic material processing; and ERA 56 Regulated waste storage; and ERA 57 Regulated waste transport.
2. Your superseded EA EPPR00412813 (previously ENCD00226405 and CM0106DA) was in effect during the period 12 July 2002 to 2 June 2019, authorised *ERA 53 composting and soil conditioner manufacturing* at the premises, by way of composting and anaerobic digestion.
3. *ERA 53 composting and soil conditioner manufacturing*, consisted of manufacturing from organic material or organic waste, 200t or more of compost or soil conditioner in a year. The Environmental Protection Regulation 2019 (the Regulation) prescribed materials that did not meet the definition of organic waste for carrying out ERA 53 composting and soil conditioner manufacturing (excluded waste). Excluded waste included ***organic chemicals***, other than a substance used for the manufacturing of fertiliser for agricultural,

Queensland Government

horticultural, or garden use. These substances are purposely manufactured to promote plant growth and elementally and as compounds

The definition of ***chemical*** in Schedule 12 (dictionary) of the Regulation includes *(e) class 1 or 2 combustible liquids under AS1940.* Petrochemicals (petroleum hydrocarbons) are class 2 combustibles under AS1940, diesel fuel and fuel oil are class 1 combustibles under 1940.

4. Waste receipt records provided by you to the department identify that, at a time or times during the period 01 July 2016 to 13 November 2019, materials received at the premises for processing by way of composting and/or anaerobic digestion include the following materials that the department reasonably believes have potential to generate odour nuisance if odour mitigation measures are not put in place:
    - Animal effluent and residues (described by you as: Piggery effluent, Animal effluent, and Abattoir effluent).
    - Oil & water mixtures/emulsions or hydrocarbons & water mixtures/emulsions (described by you as TPH water, Dirty water, Wash-down water, and Grease Trap Waste (GTW)). This included waste sourced from Crestmead Cleanaway, Nationwide Narangba, and local government operated vehicle wash-down facilities.
    - GTW from domestic premises and food preparation processes, described by you as GTW;
    - Food processing waste (described by you as Fruit puree, and Vegetable oil).
    - Bio-solids.
    - Coffee water and Coffee grinds.
5. Between February 2018 and July 2019, the department issued you with a number of written warnings and a Penalty Infringement Notice (PIN), in relation to the activities at the premises, as follows:
    i. On 04 July 2019 written warning (WARN8200) for carrying out *ERA 58 regulated waste treatment* at the premises, at a time or times during February 2018 and March 2018, without holding or acting under an EA for the activity.
    ii. On 12 February 2018:
        - written warning (WARN7614) for causing odour nuisance on 1 October 2017 at a nuisance sensitive place.
        - PIN for causing odour nuisance at a nuisance sensitive place on 27 October 2017.
        - written warning (WARN7615) for causing odour nuisance at nuisance sensitive place on 5 November 2017.
6. The department continues to receive numerous community notification alleging nuisance odour impacting amenity at nuisance sensitive receptors. The odour is alleged to be coming from the activities being carried out at the premises. Community notifications include signed odour logs by community notifiers alleging odour nuisance recorded between 13 September 2017 and 14 October 2019.
7. Under section 491(2) of the Act, *Special evidentiary provision-particular emissions*. An authorised person may give evidence, without any need to call further opinion evidence, that the authorised person formed the opinion based on the authorised person's own senses that –.
    (a) *The emission was made from the alleg*ed source and travelled to another place.

8. Authorised Officers of the department formed an opinion, based on odours they detected within the vicinity of the premises on 15 March 2019 and on 25 March 2019, that offensive odours were at times emitted from the premises and travelled to another place:

   - 15 March 2019 at 1:10pm, at a location described as a road reserve approximately 350m south-southwest of the anaerobic treatment ponds located at the premises. Authorised Officers observed odour which they considered to be offensive if experienced at a nuisance sensitive place, and described the odour as 'oily, fatty and sickening', and exhibiting characteristics of grease trap waste; the odour intensity was rated as 'distinct to strong' and considered bearable for short duration of time (before eliciting attempts to avoid exposure). The wind direction at the time of the odour assessment was North-northwest placing the premises upwind of the odour assessment location. The Authorised Officers identified the premises as the sole source of the nuisance odour.
   - 25 March 2019 at 11:32am, at a location on Jarvis Road approximately 600m south of the anaerobic digestion ponds located at the premises, an Authorised officer identified odour emissions believed to be caused as a result of activities undertaken at the premises; and the odour was described by the authorised officer as a 'strong, greasy, wet manure odour'. The officer drove to the nearby piggery where no odour was detected. Although the Authorised Officer did not record the wind conditions at the time of the assessment, I have obtained and reviewed weather information recorded by the nearest Australian Bureau Of Meteorology weather station located at Kingaroy Airport which is located approximately 36km South-southwest of the premises which shows that the wind direction at the time of the assessment was North-northwest placing the premises upwind of the odour assessment location.

   In the opinion of the Authorised Officers, the odours they experienced on 15 March 2019 and 25 March 2019 have the potential to constitute environmental nuisance if experienced at a sensitive receptor (e.g. a residence) for any sustained period; and the nature and intensity of the odours experienced by Authorised Officers on these occasions is consistent with descriptions of odour nuisance reported by community notifiers. The Authorised Officers identified the premises to be the sole source of nuisance odour as no other sources were identified during their investigation.

9. **Environmental harm** is defined in section 14 of the Act as follows:

   (1) Environmental harm is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.

   (2) Environmental harm may be caused by an activity—

   (a) whether the harm is a direct or indirect result of the activity; or

   (b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

   Environmental nuisance is defined in section 15 of the Act as:

   Unreasonable interference or likely interference with an environmental value caused by-

   (a) Aerosols, fumes, light, noise, odour, particles or smoke; or

   (b) An unhealthy, offensive or unsightly condition because of contamination; or

   (c) Another way prescribed by regulation.

   Environmental value (EV) is defined in section 9 of the Act as follows:

(a) *A quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or*

(b) *Another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.*

10. Public amenity is an environmental value prescribed in the Act that may be adversely affected by odour.

11. Community notifiers have described the way that the odour affects their ability to enjoy the amenity of their home environment as:

- Feeling nauseated as a result of experiencing the nuisance odour;
- Being woken from their sleep due to nuisance odour;
- Having to close up their homes and turn on the air conditioner in an attempt to reduce the unpleasant effects of the nuisance odour;
- Having a reduced enjoyment of outdoor entertaining areas at their home because of the unpleasant nature of the nuisance odour;
- A reluctance to host friends and family because of the nuisance odour.

12. Based on the compliance history of the site, community reports of odour nuisance and the investigations conducted by the department, the department considers that there has been an unreasonable interference or likely interference with the public amenity environmental value caused by odour at nuisance sensitive places.

13. I am satisfied that events and/or activities at the premises is causing or is likely to cause environmental harm, in particular environment nuisance (odour).

14. I consider that further investigations are necessary to determine the source, cause and extent of environmental harm to environmental values (EVs) related to public amenity, and the findings of those investigations reported to the department.

B. Requirements

The report on the environmental investigation must address the following relevant matters:

Engage the services of an independent **suitably qualified person** (as defined in Chapter 12, Part 3 of the Act) to conduct an investigation into the source/s of odour emissions (emissions inventory) at your premises, investigate the cause/s of the odour emissions form the source, investigate the extent of odour emissions and make recommendations of control measures to mitigate the cause of the odour emissions.

1. Conduct an investigation into all potential and actual sources of odour generated from activities carried out at the premises, which must include:
    a. Develop an inventory of all sources of odour, including continuous sources and discontinuous (event) odour sources. The inventory must include the following:
        i. waste receipt areas;
        ii. mixing and storage areas;
        iii. screening areas;
        iv. dry composting areas / windrows;

v. anaerobic / fermentative ponds;

vi. leachate / stormwater collection ponds;

vii. irrigation areas; and

viii. all potentially odorous waste streams received.

b. Collect representative odour samples from all identified sources of odour identified under Requirement 1.a.

c. Analyse the samples collected under Requirement 1.b using laboratory olfactometry according to the most recent iteration of 'AS/NZS 4323.3: Stationary source emissions, Part 3: Determination of odour concentration by dynamic olfactometry', and determine odour emission rates in accordance with a recognised method.

d. Develop an emission inventory based on the source monitoring analysis results collected under Requirement 1.c.

2. Conduct an investigation into the cause(s) of odour emissions generated from activities carried out at the premises. In particular determine how your composting processes, anaerobic/fermentative processes, volumes of waste received, storage of waste, mixing ratios, windrow turning, and pond retention time impacts the sources identified in Part 1 to release odour. This investigation must include:

   a. Conduct a comprehensive review of on-site processes, including:

      i. feedstock acceptance and storage, incorporating of liquid waste products (including digested sludge) into dry composting, windrow turning and product screening; and

      ii. composting processes across pasteurisation and maturation phases and how you manage for key parameters (nutrient balance, moisture content, oxygen content, and temperature); and

      iii. liquid waste processing across all digestion/maturation phases and how you manage for key parameters (pH, carbon to nutrient ratios, retention time etc); and

      iv. Application / irrigation of treated effluent from ponds at the premises to land.

   b. categorise all feedstock into categories from lowest to highest potential environmental risk, for guidance on the categorisation see "Designing, constructing and operating composting facilities, Environment Protection Authority, Victoria, March 2017; and

   c. from the findings in Requirements 2.a. and 2.b conduct a further review to consider how the risks associated with each feedstock are managed throughout the composting operation, from receival through to end product; and

   d. from the findings in Requirements 2.a. and 2.b conduct a further review to consider how the risks associated with each feedstock are managed throughout the liquid waste processing operation, from receival through to end product, including the irrigation of treated effluent to land and management of digested sludge.

3. A **suitably qualified person** (as defined in Chapter 12, Part 3 of the Act) must conduct an investigation into the extent of odour emissions generated from activities carried out at the premises which must include:

a. From the results obtained in Requirements 1 and 2 of this Notice, model the dispersion of odour from the premises, for the below scenarios to estimate levels of odour at sensitive receptors. The modelling must be undertaken in accordance with the latest iteration of the departments guide 'Odour Impact Assessment from Developments'. The results must be presented as concentration contour plots and frequency plots. The scenarios for the dispersion modelling are:

   i. Typical current operations (business as usual); and

   ii. Determine where the greatest risk of odour lies (from all activities carried out at the premises) and rerun the model eliminating the feedstock one at a time to determine any change to the predicted impact.

b. Outline any assumptions made in development of the model and limitations of the model performance.

4. The **suitably qualified person** must make recommendations, with consideration to best practice environmental management and all reasonable and practicable measures that can be implemented onsite to minimise the risk of environmental nuisance from the releases of noxious or offensive odours to any nuisance sensitive place.
5. The recommendations must outline what measures can be implemented immediately (within 1 month from the date of this notice), what measures can be implemented in the short term (within 6 months from the date of this notice) and what measures can be implemented in the long-term (greater than 6 months from the date of this notice) to reduce the likelihood of environmental nuisance (odour).
6. **Environmental Report**: By close of business day on **30 June 2020,** you must submit to the department an environmental report on the environmental investigation required by this Notice. The environmental report must address all the requirements of this Notice.
7. The environmental investigation and the environmental report required by this notice must be prepared by an independent suitably qualified person (as defined in Chapter 12, Part 3 of the Act).

The environmental report must be submitted to the department on or before the close of business **30 June 2020**.

As the recipient of this Notice, you are also required to provide a statutory declaration in the form attached, to accompany the environmental report submitted to the department.

The suitably qualified person who prepares the environmental report must also provide a statutory declaration in the form attached to the environmental report submitted to the department.

Copies of the template statutory declarations can also be accessed from the Queensland Government website at www.qld.gov.au, using the publication number as a search term:

- Statutory declaration environmental evaluation for recipient (ESR/2016/1997)
- Statutory declaration for suitably qualified person (ESR/2016/2266)

Take notice:

1. The requirements of the notice to conduct or commission an environmental investigation take effect immediately upon service of this notice;
2. This notice remains in force until further notice from the department; and

3. You are responsible for meeting the costs of conducting or commissioning the environmental evaluation, preparing the environmental report and providing any further information as requested by the department.

C. Reviews and appeals

The provisions regarding reviews of decisions and appeals are found in sections 519 to 539 of the Act.

A person who is dissatisfied with certain decisions of the department, may be able to apply to have the department review that original decision.

Generally, a request to have a decision reviewed must:

- be made within 10 business days of the decision being notified to the person;
- be supported by enough information to enable the department to decide the application for review; and
- be made using the application form, Application for review of original decision (ESR/2015/1573) available on the Queensland Government website at www.qld.gov.au, using the publication number (ESR/2015/1573) as a search term.

Where an application has been made for a decision to be reviewed, the applicant may also apply to the relevant court for a stay of the decision to secure the effectiveness of the review.

Once the original decision has been reviewed, a person who is dissatisfied with the review decision may be able to appeal against that decision to the relevant court within 22 business days after receiving notice of the review decision.

A person whose interests are or would be adversely affected by a decision of the department may also be able to request a statement of reasons for a decision or a statutory order review under the *Judicial Review Act 1991*.

For further information about reviews and appeals see the information sheet, Internal review and appeals (ESR/2015/1742) available on the Queensland Government website at www.qld.gov.au, using the publication number (ESR/2015/1742) as a search term.

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You may have other legal rights or obligations and should seek your own legal advice.

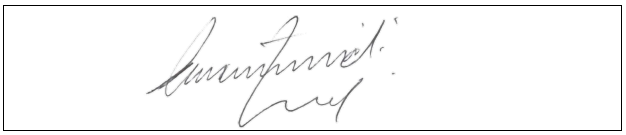
D. Penalty

Failure to comply with a notice to conduct or commission an environmental evaluation is an offence.

15. The maximum penalty for an individual is 300 penalty units, totalling **$40,035**.

16. The maximum penalty for a corporation is 1500 penalty units, totalling **$200,175**.

Should you have any queries in relation to this notice, please contact Carol Hardy of the department on telephone number 4302 8537.



Signature

07 January 2020

Date

William Inonda

Delegate of the Chief Executive

Department of Environment and Science

Environmental Protection Act 1994

Enquiries:

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