15th October 2013

Ingham Property Development Pty Ltd
Locked Bag 4000
Liverpool BC NSW 1871

Attention: **Michael Parkinson**
National Property Manager

Dear Michael

Update of limited preliminary site investigation carried out in November 2010 for Inghams Processing Plant, Tahmoor, NSW.

1.0 Introduction

Environmental Earth Sciences NSW undertook a limited preliminary site investigation at the Inghams Processing Plant, Tahmoor, NSW in November 2010 (Environmental Earth Sciences NSW November 2010 report number 110088, Attachment 1). The site is indicated on Figure 1. The original assessment formed part of a rezoning application to Council to rezone the land to accommodate residential Lots.

On behalf of Ingham Property Development Pty Ltd (Ingham), Urbis are currently submitting a planning proposal to Council for part of the subject site (referred to in the 2010 report as "Main Parcel – Old Duck Farm". The boundaries of the current investigation are indicated on Figure 2. Environmental Earth Sciences NSW was therefore requested to carry out a review of the original report and undertake a site walkover to assess the current site conditions and confirm they are as per the 2010 report.

This report has been produced for and is the property of Ingham Property Development Pty Ltd. The investigation has been conducted as per Environmental Earth Sciences NSW proposal number PO112083 and confirmation to undertake the work received by email from Yi-Juan Koh at Urbis on behalf of Michael Parkinson of Inghams. This report should be read in conjunction with the original report included in Attachment 1 and the limitations in Section 6.0.

2.0 Objective and scope of works

The objective of this investigation was to assess whether or not the site conditions have changed since the 2010 investigation. In order to achieve this objective the following scope of works was undertaken:

- a desktop review of the 2010 report; and
- a site walkover.

3.0 Site identification and inspection

The site has been identified as a portion of the Inghams Turkey and Duck Processing Plant, Cross Street, Tahmoor, NSW. Pertinent site details are included in Table 1.

TABLE 1 SITE IDENTIFICATION

Item	Details
Site owner	Ingham Property Development
Address	Cross Street, Tahmoor, NSW
Lot and DP	Lot 255 DP 10669; Lots 1 – 6 DP 1128745; and Lot C DP374621
Site area	Approximately 166 ha
Land use zoning	RU4 (Rural Small Holdings)
Local Government Authority and Parish	Wollondilly Council, Parish of Couridjah
Locality and site map	Figures 1 and 2

The site inspection was undertaken on 29 May 2012 along with Michael Parkinson of Inghams. Only the section of the site indicated on Figure 2 and known as the "Main Parcel – Old Duck Farm" was inspected as the rezoning application is restricted to this part of the site.

The site is currently operational and partly occupied by a tenant duck farmer. It mainly consists of open space and wooded areas, the Bargo River forms the boundary of the site to the south and the rest of the area is fenced. A locked main gate provides access from the main road. An operational turkey hatchery owned and operated by Inghams is situated at the east of the site, several operational duck sheds are present to the west along with access roads and some concrete/bitumen hardstand areas surrounding the sheds. An above ground fuel storage tank was noted near to the duck sheds, no staining was evident around the tank.

Site conditions appeared to be as per the 2010 investigation with the following exceptions or notable inclusions:

- it was noted that irrigation is now being carried out across the site. A newly installed pipeline for irrigation water has been installed and the water for irrigation is drawn from the six wastewater treatment irrigation ponds on the Processing Plant site;
- in the north east of the site a small stockpile of clay (approximately 10 m^3) with cobbles of sandstone was observed along with two large palm trees. The palms and stockpile appeared to have been dumped illegally (Michael Parkinson confirmed that no permission had been granted to bring this material to site);
- fibro fragments (possible asbestos containing material) were still visible on the concrete footings at the east of the "Old Duck Area"; and
- a large blackberry thicket was observed to the south of the hatchery. While blackberries can sometimes indicate an area of dumped rubbish or disturbed ground, the mound was inspected and nothing was sighted below the brambles.

4.0 Conclusion

Environmental Earth Sciences NSW was engaged to update a limited preliminary site investigation carried out at the Ingham Processing Plant, Tahmoor, NSW in November 2010. The update was required in order to assist with a rezoning application which is being submitted to Council.

Historical documentation was not reviewed as part of this investigation however a review of the previous report and a site inspection were carried out to assess whether or not conditions had changed.

The majority of the site generally appeared as per the original inspection with the exception of the stockpiled soil and palm roots close to the woodchip shed at the north east of the site, and the irrigation of the site. As with the previous investigation fragments of fibro sheeting were noted on the concrete footings at the east of the site. No sign of visual or olfactory contamination was noted at the site however intrusive investigation was not part of the scope of works for this investigation.

Based upon the work undertaken as part of this investigation at the site, Environmental Earth Sciences NSW do not consider that the current conditions onsite to have changed significantly from 2010 so as to pose a risk to the environment or to human health.

Environmental Earth Sciences NSW therefore considers that the majority of the site in its current condition is suitable for the intended residential landuse, however a few localised areas onsite pose a potential limited risk to the environment and human health. Environmental Earth Sciences NSW advises the following recommendations be implemented prior to or during the development phase to return these areas to a condition suitable for residential landuse.

Based upon the works carried out to date, providing these recommendations are implemented prior to the development stage and are appropriately validated we see no reason as to why the site in its current state should not be suitable for rezoning for a residential use.

5.0 Recommendations

As fragments of fibro sheeting were noted during the investigation, Environmental Earth Sciences NSW consider it prudent to undertake a targeted soil investigation in the area surrounding the footings at the east of the woodchip storage shed in order to:

- determine if the fibro sheeting is an asbestos containing material (ACM);
- determine the extent of any ACM identified.

Should ACM be identified at the site then a remediation action plan can be produced in order to ensure the site is made suitable for the proposed residential use.

The stockpiled soil to the north east of the site should be classified for waste disposal and then removed. The area underneath the stockpile should be validated to ensure no contamination of the area has occurred.

Should the operational areas of the site including the duck sheds and associated areas be decommissioned in the future then we would recommend further investigation of these areas.

6.0 Limitations

This letter report has been prepared by Environmental Earth Sciences NSW ABN 109 404 006 in response to and subject to the following limitations:

1. The specific instructions received from Urbis on behalf of Inghams Enterprises Pty Ltd;
2. The specific scope of works set out in PO112082 issued by Environmental Earth Sciences NSW to Urbis for and on behalf of Ingham Property Development Pty Ltd;
3. May not be relied upon by any third party not named in this report for any purpose except with the prior written consent of Environmental Earth Sciences NSW (which consent may or may not be given at the discretion of Environmental Earth Sciences NSW);
4. This report comprises the formal report, documentation sections, tables, figures and appendices as referred to in this report and must not be released to any third party or copied in part without all the material included in this report for any reason;
5. The report only relates to the site referred to in the scope of works being located at Inghams Turkey and Duck Farm, Cross Street, Tahmoor and indicated on Figure 2 ("the site");
6. The report relates to the site as at the date of the report as conditions may change thereafter due to natural processes and/or site activities;
7. No warranty or guarantee is made in regard to any other use than as specified in the scope of works and only applies to the depth tested and reported in this report,
8. Fill, soil, groundwater and rock to the depth tested on the site may be fit for the use specified in this report. Unless it is expressly stated in this report, the fill, soil and/or rock may not be suitable for classification as clean fill if deposited off site; and
9. Our General Limitations set out at the back of the body of this report.

Should you have any further queries, please contact us on (02) 9922 1777.

On behalf of
Environmental Earth Sciences NSW

Edited by
Josh Bray
Senior Environmental Scientist

Project Manager
Naomi Price
Senior Environmental Scientist

Project Director / Internal Reviewer
Coin McKay
Principal Soil Scientist

7.0 References

Environmental Earth Sciences NSW November 2010 Limited Preliminary Environmental Site Assessment of Inghams Processing Plant, Tahmoor, NSW

ENVIRONMENTAL EARTH SCIENCES GENERAL LIMITATIONS

Scope of services

The work presented in this report is Environmental Earth Sciences response to the specific scope of works requested by, planned with and approved by the client. It cannot be relied on by any other third party for any purpose except with our prior written consent. Client may distribute this report to other parties and in doing so warrants that the report is suitable for the purpose it was intended for. However, any party wishing to rely on this report should contact us to determine the suitability of this report for their specific purpose.

Data should not be separated from the report

A report is provided inclusive of all documentation sections, limitations, tables, figures and appendices and should not be provided or copied in part without all supporting documentation for any reason, because misinterpretation may occur.

Subsurface conditions change

Understanding an environmental study will reduce exposure to the risk of the presence of contaminated soil and or groundwater. However, contaminants may be present in areas that were not investigated, or may migrate to other areas. Analysis cannot cover every type of contaminant that could possibly be present. When combined with field observations, field measurements and professional judgement, this approach increases the probability of identifying contaminated soil and or groundwater. Under no circumstances can it be considered that these findings represent the actual condition of the site at all points.

Environmental studies identify actual sub-surface conditions only at those points where samples are taken, when they are taken. Actual conditions between sampling locations differ from those inferred because no professional, no matter how qualified, and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden below the ground surface. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from that predicted. Nothing can be done to prevent the unanticipated. However, steps can be taken to help minimize the impact. For this reason, site owners should retain our services.

Problems with interpretation by others

Advice and interpretation is provided on the basis that subsequent work will be undertaken by Environmental Earth Sciences NSW. This will identify variances, maintain consistency in how data is interpreted, conduct additional tests that may be necessary and recommend solutions to problems encountered on site. Other parties may misinterpret our work and we cannot be responsible for how the information in this report is used. If further data is collected or comes to light we reserve the right to alter their conclusions.

Obtain regulatory approval

The investigation and remediation of contaminated sites is a field in which legislation and interpretation of legislation is changing rapidly. Our interpretation of the investigation findings should not be taken to be that of any other party. When approval from a statutory authority is required for a project, that approval should be directly sought by the client.

Limit of liability

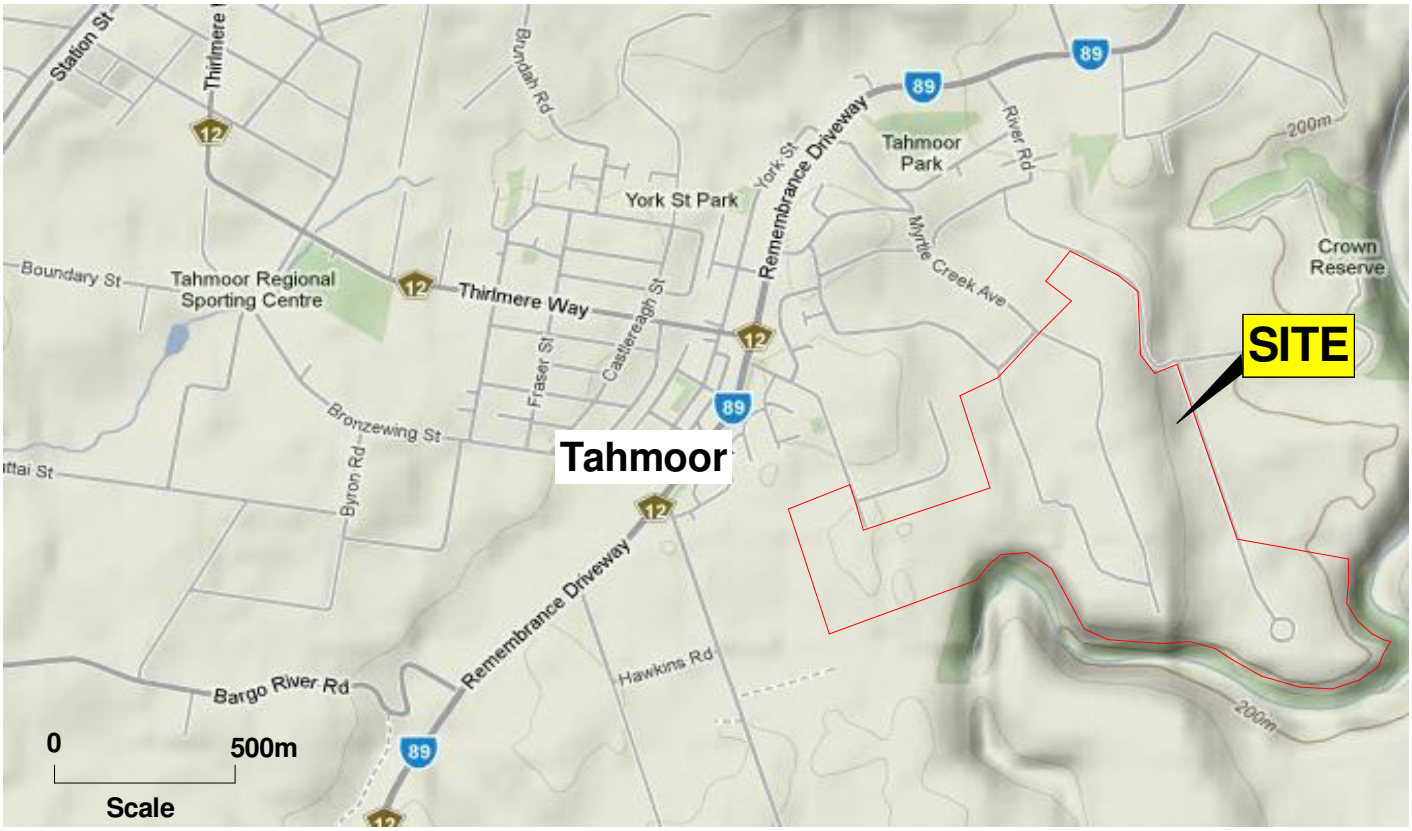
This study has been carried out to a particular scope of works at a specified site and should not be used for any other purpose. This report is provided on the condition that Environmental Earth Sciences NSW disclaims all liability to any person or entity other than the client in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by any such person in reliance, whether in whole or in part, on the contents of this report. Furthermore, Environmental Earth Sciences NSW disclaims all liability in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by the client, or any such person in reliance, whether in whole or any part of the contents of this report of all matters not stated in the brief outlined in Environmental Earth Sciences NSW's proposal number and according to Environmental Earth Sciences general terms and conditions and special terms and conditions for contaminated sites.

To the maximum extent permitted by law, we exclude all liability of whatever nature, whether in contract, tort or otherwise, for the acts, omissions or default, whether negligent or otherwise for any loss or damage whatsoever that may arise in any way in connection with the supply of services. Under circumstances where liability cannot be excluded, such liability is limited to the value of the purchased service.

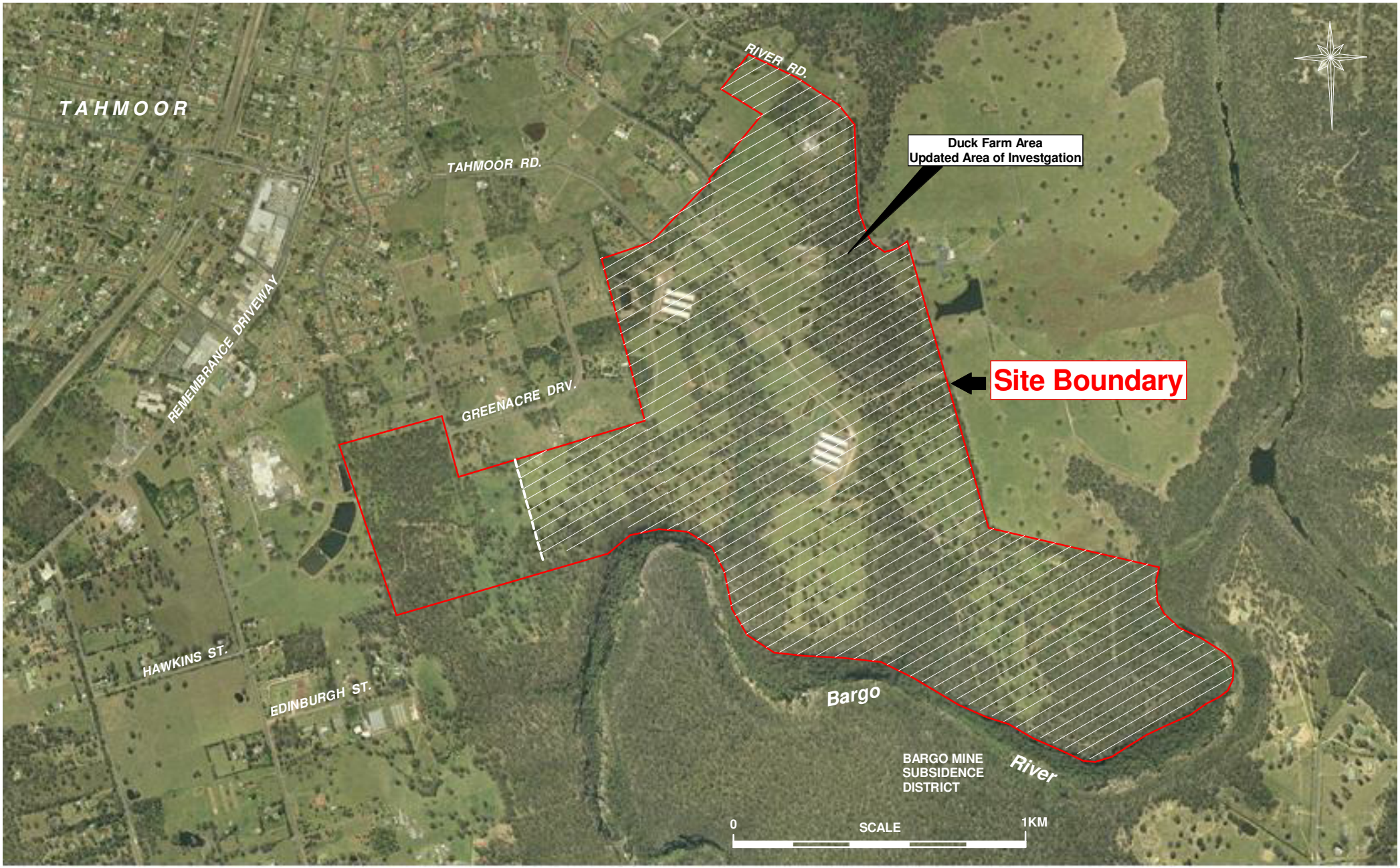
FIGURES

North

Site Locality Plan: Tahmoor Road, Tahmoor, NSW



ENVIRONMENTAL EARTH SCIENCES THE KNOW AND THE HOW	Title: Site Locality Plan	
	Location: Tahmoor Road, Tahmoor, NSW	
Client: Inghams Enterprises Pty Ltd		Job number: 112039
Drawn by: TRJ	Scale: As shown	Source: Google Maps
Proj Man: NP	Date: 15 Oct. 2013	Figure 1



Reference: SIX Site Spatial Information Exchange aerial photograph.

ENVIRONMENTAL EARTH SCIENCES THE KNOW AND THE HOW	Title: Site Features	
	Location: River Road, Tahmoor, NSW	
Client: Inghams Enterprises Pty. Ltd.		Job number: 112039
Drawn by: TRJ	Scale: As shown	Source: See Ref.
Proj Man: NP	Date: 15 Oct. 2013	Figure 2

ATTACHMENT 1

12 November 2010

Inghams Enterprises Pty Ltd
Locked Bag 4000
Liverpool BC NSW 2000

Attention: **Michael Parkinson**
National Property Manager

Dear Michael

Limited preliminary environmental site assessment of Inghams Processing Plant, Tahmoor, NSW.

1.0 Background and introduction

Environmental Earth Sciences NSW was engaged by Inghams Enterprises Pty Ltd to undertake a limited PSI at the Inghams Processing Plant, Tahmoor, NSW (hereafter referred to as "the site"). We understand that the assessment is to form part of a rezoning application to Council to rezone the land as residential and rural residential.

Environmental Earth Sciences NSW is not responsible for changes which occur due to alterations of site conditions or chemistry since the time of the inspection, for example through illegal dumping, removal of vegetation or dewatering of ponds.

This report has been produced for and is the property Inghams Enterprises Pty Ltd. The investigation has been conducted as per Environmental Earth Sciences NSW proposal number PO110211 dated 15 September 2010 and confirmation to undertake the work received by email from Michael Parkinson of Inghams Enterprises Pty Ltd on the 22 September 2010. This report should be read in conjunction with the limitations presented in Section 11.

2.0 Objective and scope of works

The objective of the works is to determine whether or not current or historic processes at the site have led to contamination occurring at the site. In order to achieve this objective Environmental Earth Sciences NSW undertook the following scope of works:

- Desktop review of:
  - historical aerial photographs of the site and surrounding areas;
  - historical titles (Main Parcel "Old Duck Farm" and processing plant parcel only);

- council Section 149 (2) and (5) certificates (Main Parcel "Old Duck Farm" and processing plant parcel only);
- review of soil maps, geological maps, groundwater bore register and other available government registers to evaluate the sensitivity of the site;
- any other readily available pertinent documentation if made available by the client; and

- site walkover to observe current site conditions and the potential for contamination to be present.

A WorkCover Dangerous Goods Search was not undertaken on the instruction of the client, as such this report does not satisfy all the requirements of a preliminary site investigation as set out in the NSW EPA Contaminated Sites: *Guidelines for Consultants Reporting on Contaminated Sites* (2000).

3.0 Site identification and inspection

3.1 Site identification

The site has been identified as the Inghams Turkey and Duck Processing Plant, Rockford Road, Tahmoor, NSW. Pertinent site details are included in Table 1.

TABLE 1 SITE IDENTIFICATION

Item	Details
Site Owner	Inghams Enterprises Pty Ltd
Address	Rockford Road, Tahmoor
Lot and DP	Lot 255 DP10669, Lot C DP374621, Lot 23 DP233658, Lot 105 DP703678, Lot 1 DP104597
Site Area	Approximately 205 ha
Land Use Zoning	Rural 1(C1(i)rural small holdings)
Local Government Authority and Parish	Wollondilly Council, Parish of Couridjah
Locality and site map	Figures 1 and 2

3.2 Site inspection

Environmental Earth Sciences NSW undertook the site inspection along with Michael Parkinson of Inghams Enterprises Pty Ltd on 30 September 2010. The entire site was inspected however is discussed in two separate sections. The following observations were made.

3.2.1 Processing Plant area (Sections 2-6, Figure 2)

The "Processing Plant" area of the site houses the Inghams Processing Plant and associated carparks and loading bays, along with the irrigation pond system. Aside from the processing plant area the majority of this area of the site comprises open paddock areas and wooded areas (Attachment 1 Photo Plates 1 and 2). A detailed inspection of the

processing plant was not included as part of this investigation as it was understood that this would not be part of the rezoning application however the following was observed:

- hardstand appeared to be in good condition;
- no chemical storage areas were sighted;
- information and inspection on above/underground storage tanks was not available;
- wooden pallets and other wooden items were stored at the east of the loading bays;
- bin storage appeared to be in the loading bays and appeared to be in good condition with no rubbish on the ground. No information was available on who was contracted to collect the waste.

Six irrigation ponds exist at the site for both anaerobic and aerobic treatment of the waste water from the processing plant. Water enters Pond 1 (Photo Plate 3) directly from the plant and is treated anaerobically, from here it flows through Pond 2 (anaerobic) and then into Ponds 3, 4, 5 and 6 which are aerobic treatment ponds. Treated water from Pond 6 is used for irrigation of the paddock areas.

Some small stockpiles of concrete and excavated topsoil and bitumen material were noted to the west of the irrigation ponds (Photo Plates 5 - 6). There was no evidence of illegal dumping of waste. The rest of the “Processing Plant” area comprised wooded areas and paddocks which are grazed by cattle, dirt tracks intersect the wooded areas for access to the site. All vegetation appeared to be healthy and did not appear distressed.

The site is fully fenced and accessed through the Inghams Enterprises security barrier. Cut and fill activities were not noted during the site visit, topography was undulating and appeared to be the natural topography of the site.

3.2.2 Main Parcel - Old Duck Farm (Section 1, Figure 2)

The “Old Duck Farm” area of the site is currently occupied by a tenant duck farmer and consists mainly of open space and wooded areas. The Bargo River forms the boundary of the site to the south, the rest of the site is fenced with a locked gate for access from the main road. Several operational duck sheds are present at the west of the site, along with access roads and some hardstand concrete/bitumen areas surrounding the sheds

Within the wooded areas are concrete slabs and metal infrastructure (Photo Plate 7 - 8) associated with historical free range turkey farming which occurred at the site. To the north east of the site is a large shed used for storage of woodchips for use in the duck sheds, to the east of this are raised concrete footings associated with sheds which have since been demolished. Within the concrete footings some fragments of fibro sheeting (likely to have been from the roofs of the sheds) were noted along with rusted metal fencing panels and other metal pieces (Photo Plate 9 - 10).

There was no evidence of chemical storage when the site walkover was conducted. In addition there was no evidence of above ground structures indicating underground storage tanks had existed on this part of the site.

Topography was undulating and generally sloped towards the Bargo River, areas of cut and fill were not noted during the site visit and topography was thought to be the natural lie of the land. There were no signs of any distressed vegetation noted during the site visit.

4.0 Surrounding Environment

4.1 Regional meteorology

The Commonwealth Bureau of Meteorology website (http://www.bom.gov.au/climate/data/ verified 26 October 2010) provides the following climatic data for the Picton Council Depot weather station (site number 068052) which is the closest station to the site:

- mean daily maximum temperatures range from 35.4℃ in January to 19.1℃ July;
- mean daily minimum temperature range from 24.8℃ i n February to 15.5℃ July;
- the average rainfall ranges from 86.4 mm in January and 65.0 mm in June; and
- evapotranspiration rates were not measured at this weather station.

4.2 Geology, soil and topography

The local geology at the site is described in the 1:100 000 Geology of the Wollongong-Port Hacking sheet 9029 - 9129 (Geological Survey of NSW, 1985) as comprising mainly of Hawkesbury Sandstone from the Triassic period. Hawkesbury Sandstone is described as being medium to coarse grained quartz sandstone with very minor shale and laminate lenses. Geology in the north and west of the site is described as comprising of Ashfield Shale, which is from the Liverpool Subgroup of the Wianamatta Shales, Ashfield Shale is a fractured shale and described in the 1:100 000 Geology of the Wollongong-Port Hacking sheet as a laminite and dark grey siltstone.

The soils across the Tahmoor region are described in the 1:100 000 Wollongong-Port-Hacking Soil Landscape sheet (NSW Soil Conservation Society, 1988) as belonging to the Lucas Heights soil landscape. The NSW Soil Conservation Society describes the landscape as gently undulating crests, ridges and plateau surfaces of the Mittagong formation (alternating bands of shale and fine grained sandstones). Local relief at 10 - 50 cm with slopes of usually <10% with extensively to completely cleared, dry sclerophyll low open-forest and low woodland. The soils are described as deep (50 - 150 cm) hard setting yellow podzolic soils on ridges and plateau surfaces with yellow earthy sands in valley flats. Limitations include low soil fertility, stoniness and hard-setting surfaces.

4.3 Hydrogeology

A groundwater bore search using the Department of Natural Resources (DNR) Atlas website (http://www.nratlas.nsw.gov.au/ verified 3 November 2010) revealed 40 registered groundwater bores within a 2 kilometre radius of the site. There are not considered to be any active groundwater abstraction wells onsite. Details are summarised as follows and are included in Attachment 2:

- ten of the 40 bores were identified upon the site, two of these were listed as monitoring bores, no other information was available on the bores on site;
- from the 30 remaining bores off site, four had available details;
    - two of these, north-east and south west of the site were identified as an irrigation bores while the others were used for domestic stock watering and unknown purposes;
    - the depths of these wells range from 6 - 120 m through materials such as clay, shale, mudstone and brown to grey sandstone; and
    - standing water level ranged from 33 - 100m.

The closest water course to the site is the Bargo River, which runs along the southern boundary of the "Old Duck Farm" area of the site and flows into the Nepean River.

5.0 Historical Review

5.1 Aerial photograph review

Seven aerial photographs taken between 1955 and 2004 were viewed as part of the investigation. Information on the site from each of the photographs has been discussed in Table 2.

In summary, the site has been generally used for farming activities since 1955. The current site layout and development was apparent on the 1972 photograph and from that point it has remained consistent. The most significant addition has been the development of a quarrying operation to the south-west of site. Except for the addition of several irrigation ponds the main water body closest to site remains the Bargo River on the sites southern boundary.

TABLE 2 AERIAL PHOTOGRAPH REVIEW

Year	Map Number	Run	Comments
1955	581-5032	10	The site mainly consisted of dense woodland on the banks of the Bargo river. To the north and west of site, there was cleared pastoral land and no significant residential developments.
1966	1440-5016	6C	The site remained similar to the 1955 aerial photograph with dense woodland around the Bargo River. The land to the north of the site had been cleared for residential development north of Remembrance Drive. To the west and south of the Bargo River significantly more land had been cleared for farming activities. At the east of the site were several small buildings and paddock areas, at the west of the site were some small buildings surrounded by bush land and some paddock areas.
1972	2018-5110	3	Prior to 1972 there had been development on site including construction of duck housing sheds, a processing plant and ponds. There was a growth in the residential area to the north of Remembrance drive.
1983	3341-229	4	The site and surrounding area remained similar to the previous aerial photograph with no significant development. This majority of the surrounding land had been cleared for farming activities.
1994	163-184	5	In 1994, the processing plant area of the site had developed and there was significant residential area to the north and north-west of site. There were more ponds on site which appeared to be full and construction of more access roads and roadways were present.
1998	142-154	4	Site infrastructure remained consistent with that of the previous aerial photograph. The Tahmoor Colliery was visible to the south of the site and no change to the residential area to the north were observed.
2004	129-143	1	In 2004 the site and surrounding areas were similar to the 1998 photograph. Small sheds used for duck housing in the north of site had been removed. The Tahmoor Colliery to the south had increased in size while the surrounding areas remained the same.
2010	Google photograph		The site and surrounding areas did not appear to have changed significantly since the previous aerial photograph

5.2 Review of environmental planning certificates

An application was made to Wollondilly Council for the provision of the Section 149(2) and (5) zoning certificates relating to the Environmental Planning & Assessment Act 1979, these have been provided in Attachment 3.

Lot 23 DP 233658 and Lot 255 DP10669
There are a number of Local and State Planning Controls relevant to this site. No issues pertaining to contaminated land were raised in the Section 149(2) zoning certificate however Councils contaminated land policy should be consulted for specific information pertaining to the site. The land is not located within a heritage conservation area and is not affected by the operation of Section 38 and 39 of the Coastal Protection Act, 1979. The Lots are however within the proclaimed Mine Subsidence District under the *Mine Subsidence Compensation Act 1961* and requires that approval is sought from the Mine Subsidence Board for all subdivision and buildings. The Mine Subsidence Board should be contacted for further information. The land is partially bush fire prone, Council should be contacted for further information.

5.3 Environmental permits, licences and registers

The following publicly available databases were checked for environmental compliance and registration:

TABLE 3 DATABASE SEARCH

Register	Result
NSW Environmental Protection Authority (EPA) Contaminated Lands Register/Priority Sites Register	Site not registered;
WorkCover Dangerous Goods Search	As per instruction by client, this search was not conducted
DECCW online Register of Notices	Site does not appear on list (as per 8 October 2010)
Australian Heritage Database and the NSW State Heritage Registry	No items onsite were registered

5.4 Historical titles

A title search was carried out as part of the historical review. The following is a list of the past title-holders of Lot 255 in DP 10669 (part of section 1 on Figure 2) and Lot 23 in DP 233658 (indicated as section 3 on Figure 2) at Tahmoor, New South Wales:

Lot 255, DP 10669 Schedule of Registered Proprietors:

- 1925 - Robert Williams Hardie and Edwin Samuel Phippard- both of Sydney, Gentleman;
- 1929 - Edwin Samuel Phippard;
- 1929 - Frederick George Phippard of Sydney Company Secretary, Austin Edward Phippard of Sydney, Engineer and Stanley Raymond Phippard of Sydney, Barrister;
- 1933 - Cecil Edward Joyce of Sydney, Company Director;
- 1952 - Keith James Moore of Tahmoor, Freeholder;

- 1989 - Mona Moore;
- 1994 - Inghams Processed Poultry Pty. Limited; and
- 2008 - Inghams Enterprises Pty. Limited.

Lot 23, DP 233658 Schedule of Registered Proprietors:

- 1924 - John Robert Stewart of Tahmoor, farmer and Myra Ida Stewart;
- 1940 - Charles Frederick Wild of Beecroft, Builder and Owen Frederick Wild of Beecroft, farmer;
- 1947 - Ena Emily Miles, wife of Bernard Wilfred Miles of Sydney, publisher;
- 1967 - A.A Tegal Pty. Limited; and
- 2006 - Inghams Enterprises Pty. Limited.

The list of former title holders indicates that the site has generally been used for residential and/or agricultural purposes and owned by private landowners until the transfer of title to Inghams in 1994 and 2006 respectively. Copies of the title certificates are included in Attachment 4.

6.0 Conclusion

Environmental Earth Sciences NSW was engaged by Inghams Enterprises Pty Ltd to undertake a limited preliminary site investigation at the Inghams Processing Plant, Tahmoor, NSW, in order to assist with a rezoning application which is being submitted to Council.

Historical documentation available for the site indicates that the site has previously been used for agricultural purposes and owned by private landowners. Aerial photograph review shows the processing plant to have been built between 1984 and 1994. The site is not listed on any available government registers as being contaminated, and is not listed as being issued with any notices relating to contamination.

During the site investigation some fragments of fibro sheeting were noted on the concrete footings at the east of the “Old Duck Farm” area, no signs of visual or olfactory evidence were noted at the site however intrusive investigation was not part of the scope of works for this investigation.

Based upon the work undertaken as part of this limited preliminary site investigation at the site, Environmental Earth Sciences NSW do not consider that the current conditions onsite pose a risk to the environment or to human health.

7.0 Recommendations

As fragments of fibro sheeting were noted during the investigation, Environmental Earth Sciences NSW consider it prudent to undertake a targeted soil investigation in the area surrounding the footings at the east of the woodchip storage shed in the “Old Duck Farm” portion of the site in order to:

- determine if the fibro sheeting is an asbestos containing material (ACM);
- determine the extent of any ACM identified.

Should ACM be identified at the site then a remediation action plan can be produced in order to ensure the site is made suitable for the proposed residential use.

Should the operational areas of the site including the irrigation ponds be decommissioned in the future then we would recommend further investigation of these areas.

8.0 Limitations

This letter report has been prepared by Environmental Earth Sciences NSW ABN 109 404 006 in response to and subject to the following limitations:

1. The specific instructions received from Inghams Enterprises Pty Ltd;
2. The specific scope of works set out in PO110211 issued by Environmental Earth Sciences NSW for and on behalf of Inghams Enterprises Pty Ltd.
3. May not be relied upon by any third party not named in this report for any purpose except with the prior written consent of Environmental Earth Sciences NSW (which consent may or may not be given at the discretion of Environmental Earth Sciences NSW);
4. This letter report comprises the formal report, documentation sections, tables, figures and appendices as referred to in the index to this report and must not be released to any third party or copied in part without all the material included in this report for any reason;
5. The letter report only relates to the site referred to in the scope of works being located at Inghams Processing Plant, Tahmoor, NSW (“the site”);
6. The letter report relates to the site as at the date of the report as conditions may change thereafter due to natural processes and/or site activities;
7. No warranty or guarantee is made in regard to any other use than as specified in the scope of works and only applies to the depth tested and reported in this report,
8. Fill, soil, groundwater and rock testing was not undertaken. Unless it is expressly stated in this report, the fill, soil and/or rock may not be suitable for classification as clean fill if deposited off site; and
9. Our General Limitations set out at the back of the body of this report.

Should you have any further queries, please do not hesitate to contact us on (02) 9922 1777.

On behalf of
Environmental Earth Sciences NSW

Project Manager
Naomi Price
Environmental Scientist

Project Director
Loek Munnichs
Senior Environmental Scientist

9.0 References

Bureau of Meteorology website 2008, Climate statistics for Australian locations – Picton Council Depot weather station *http://www.bom.gov.au/climate/averages/tables/*

Department of Natural Resources Resource Atlas *http://www.nratlas.nsw.gov.au/*

Geological Survey of NSW Department of Mineral Resources (1983) — Geology of the Wollongong-Port Hacking 1:100 000 Sheet 9029-9129.

NSW Department of Natural Resources. (Updated 2007) - NSW Natural Resource Atlas http://test.nratlas.nsw.gov.au/

NSW Soil Conservation Society (1988) Soil Landscape of Wollongong-Port Hacking 1:100 000 Sheet

ENVIRONMENTAL EARTH SCIENCES GENERAL LIMITATIONS

Scope of services

The work presented in this report is Environmental Earth Sciences response to the specific scope of works requested by, planned with and approved by the client. It cannot be relied on by any other third party for any purpose except with our prior written consent. Client may distribute this report to other parties and in doing so warrants that the report is suitable for the purpose it was intended for. However, any party wishing to rely on this report should contact us to determine the suitability of this report for their specific purpose.

Data should not be separated from the report

A report is provided inclusive of all documentation sections, limitations, tables, figures and appendices and should not be provided or copied in part without all supporting documentation for any reason, because misinterpretation may occur.

Subsurface conditions change

Understanding an environmental study will reduce exposure to the risk of the presence of contaminated soil and or groundwater. However, contaminants may be present in areas that were not investigated, or may migrate to other areas. Analysis cannot cover every type of contaminant that could possibly be present. When combined with field observations, field measurements and professional judgement, this approach increases the probability of identifying contaminated soil and or groundwater. Under no circumstances can it be considered that these findings represent the actual condition of the site at all points.

Environmental studies identify actual sub-surface conditions only at those points where samples are taken, when they are taken. Actual conditions between sampling locations differ from those inferred because no professional, no matter how qualified, and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden below the ground surface. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from that predicted. Nothing can be done to prevent the unanticipated. However, steps can be taken to help minimize the impact. For this reason, site owners should retain our services.

Problems with interpretation by others

Advice and interpretation is provided on the basis that subsequent work will be undertaken by Environmental Earth Sciences NSW. This will identify variances, maintain consistency in how data is interpreted, conduct additional tests that may be necessary and recommend solutions to problems encountered on site. Other parties may misinterpret our work and we cannot be responsible for how the information in this report is used. If further data is collected or comes to light we reserve the right to alter their conclusions.

Obtain regulatory approval

The investigation and remediation of contaminated sites is a field in which legislation and interpretation of legislation is changing rapidly. Our interpretation of the investigation findings should not be taken to be that of any other party. When approval from a statutory authority is required for a project, that approval should be directly sought by the client.

Limit of liability

This study has been carried out to a particular scope of works at a specified site and should not be used for any other purpose. This report is provided on the condition that Environmental Earth Sciences NSW disclaims all liability to any person or entity other than the client in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by any such person in reliance, whether in whole or in part, on the contents of this report. Furthermore, Environmental Earth Sciences NSW disclaims all liability in respect of anything done or omitted to be done and of the consequence of anything done or omitted to be done by the client, or any such person in reliance, whether in whole or any part of the contents of this report of all matters not stated in the brief outlined in Environmental Earth Sciences NSW's proposal number and according to Environmental Earth Sciences general terms and conditions and special terms and conditions for contaminated sites.

To the maximum extent permitted by law, we exclude all liability of whatever nature, whether in contract, tort or otherwise, for the acts, omissions or default, whether negligent or otherwise for any loss or damage whatsoever that may arise in any way in connection with the supply of services. Under circumstances where liability cannot be excluded, such liability is limited to the value of the purchased service.

ATTACHMENT 1 PHOTOGRAPHS

Plate 1 - Wooded area in Processing Plant section of site

Plate 2 - Paddock area in Processing Plant Section of site

Plate 3 - Irrigation Pond

Plate 4 - Irrigation Pond

Plate 5 - Concrete stockpiles

Plate 6 - Concrete and bitumen stockpiles

Plate 7 - Concrete footings in “Old Duck Farm”

Plate 8 - Concrete footings in “Old Duck Farm”

Plate 9 - Fibro fragments noted in old footings in “Old Duck Farm”

Plate 10 - Fibro fragments noted in old footings in “Old Duck Farm”