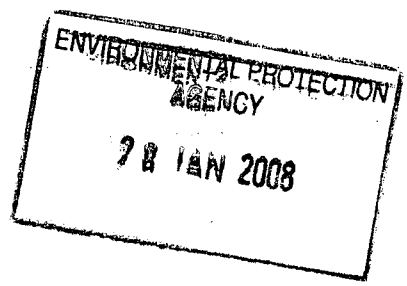
Environmental Efficiency
Consulting Engineers

Parnell House,
19 Quinsboro Road,
Bray Co.Wicklow,
Ireland.

25 January 2008

Administration
Licensing Unit
Office of Climate, Licensing & Resource Use
Environmental Protection Agency
Headquarters
PO Box 3000
Johnstown Castle Estate
County Wexford



EPA Ref: W0239-01

Re: Article 16(1) – Further Information, Particulars and Evidence

Dear Sir/Madam,

In response to the EPA's request for further information (dated 17/12/07) relating to an application for a waste licence for Tonge Industries Limited, the following information is provided:

1. **Operational history of the site**
   a. The activity on the site commenced in May 2000.
   b. Spraying activities on site: A small proportion of transformers that were repaired between May 2000 and October 2005 required spray painting. This was carried out in a spray booth. The spray booth was an Airflow model DF3.3/3PH Dry Filter Spraybooth with working dimensions of 3.2m wide x 2.2m high x 1.2m deep (see below for Product Detail Sheet). The filter medium was disposable type corrugated paper.
      Five transformers were spray painted per week on average. Using paint purchasing records, it was calculated that approximately 0.15 litres of paint was used per transformer.
   c. The spraying ceased in October 2005. The spraying unit was decommissioned in January 2007.
   d. The pyrolysis oven was decommissioned in January 2007.

2. **Working hours and number of employees**
Operating hours: 8:00 to 16:00 Monday to Thursday, 8:00 to 15:00 Friday
Number of employees: 4

Tel: 353 1 276 1428 Fax: 353 1 276 1561 Email:energy@iol.ie

www.enviro-consult.com

Registered Office as above. Registered Number 243 412
Directors : Noel J. McGrath, Robert B. Sutcliffe (British)

3. Revised non-technical summary

Non-technical summary

Introduction

Tonge Industries Limited, Unit 7, First Avenue, Cookstown Industrial Estate, Tallaght, Dublin 24 are applying for a Waste Licence for their activity at the aforementioned premises. Established in 1946, Tonge Industries Ltd is a recycling and transformer specialist company, recycling all metals and waste oil at its dedicated site. At the plant, hardware, such as transformers, sub-stations, regulators are dismantled and metals reclaimed and segregated. Oil from the equipment is sucked into a holding tank before being transported off site for recycling.

Tonge Industries has had a long running business relationship with the ESB, playing a pivotal role in its network renewal programme. It has been recycling and decommissioning ESB transformers since the mid-sixties.

Classification of activities

The relevant waste disposal and recovery activities, as per the Third and Fourth Schedules of the Waste Management Acts 1996-2003 to which this application relates are:

Fourth Schedule – Waste Recovery Activities

Principal activity:

3. Recycling or reclamation of metals and metal compounds.

Other Activities:

8. Oil re-fining or other re-uses of oil.

On-site operations

The facility will operate during the following hours:

- 8:00 – 16:00 Monday to Thursday
- 8:00 – 15:00 Friday

Number of Employees: 4

The facility is used for the recovery of metals and transformer oil. Transformers are delivered to Tonge Ind. by the ESB. The transformers are tested and segregated into transformers for repair and transformers for decommissioning. The decommissioned transformers are opened and the oil is sucked out. The oil is stored in a bunded tank. Metals with an oily residue are stored in a sump to allow any oil on the metal to drain off. The rest of the metals are separated using air tools. The metals and the oil are taken off-site by a licensed contractor. Approximately 625 tonnes of metal and 600,000 litres of oil (approx. 510 tonnes) are recovered per annum.

Operational history of the site

The present activity on the site commenced in May 2000. A spray booth and a pyrolysis oven were used on the site. Approximately 5 transformers were sprayed per week. Spraying ceased in October 2005 and the spray booth was decommissioned in January 2007. The pyrolysis oven was decommissioned in January 2007.

Process description
Transformers are delivered to Tonge Ind. in special bins. Transformers are inspected and segregated into transformers for repair and transformers for decommissioning. Transformers with oil leaks are delivered in bags and are transferred to the dismantling area.
Transformers for decommission are cut open and the insulating oil sucked to a 13,000l holding tank. The coils are taken out of the transformers and placed in boxes with sealed bases. The coils are taken out of the boxes to allow any oil to drain to a sump. The coils are then returned to the boxes and are ready for transport. The transformer core is returned to the transformer case and removed to the skip. All metals are removed to a licensed metal recycling company.

Emissions and abatement
Emissions to atmosphere – There are no emissions to atmosphere.
Emissions to surface water – Only uncontaminated surface water runoff from site and rain water from roofs is discharged via a full retention interceptor to county council surface water sewer.
Emissions to sewer water – Only domestic effluent is discharged to domestic sewer. There is no trade effluent generated on site.
Emissions to groundwater and soils – All areas of the site are hard standing. There are no emissions to groundwater and soils.
Noise impacts – The site is located in an industrial area. There are no noise sensitive locations nearby. There are no impacts from noise.

Monitoring
Emissions to surface water – A surface water monitoring point will be located at the final chamber of the interceptor. The monitoring point has been called SW1.
It is proposed to take an annual water sample from SW1 and analyse it for COD and FOG.

Energy Efficiency
Electricity is the main form of energy used on site. Electricity is supplied by Airtricity.
Forklift gas is also used.

The main consumers of electricity are the following:

a. The air compressor
b. Lighting
c. Heating

The air compressor: The air compressor supplies compressed air to the air tools used in the dismantling area. The compressor is maintained regularly. Leak checks are performed regularly.
Lighting: It is necessary to use lighting throughout the year.
Heating: Electric storage heaters in the offices are used during the winter months. There is no heating on the factory floor.

Tonge Industries increased energy efficiency in 2007 by reducing the size of their premises, the decommissioning of the pyrolysis oven and by simplifying the process.
As part of the ISO 9001 Quality Management System, energy consumption is monitored and analysed.

Closure of the facility

1. An application to surrender the waste licence will be made to the EPA.
2. All metal and oil resulting from dismantling transformers will be removed from the site by licensed contractors.
3. The bunded oil tank will be emptied and decommissioned. The pipeline will be emptied and disposed of in a suitable manner. The pump will be decommissioned.
4. All raw materials will be removed from the site.
5. All storage containers for chemical will either be returned to the supplier or washed out and disposed of off site by a suitable waste contractor. All washings will also be disposed of off site.
6. The test cell will be decommissioned by suitably qualified personnel.

If you have any questions relating to this matter please contact Jonathan Dowling, Environmental Efficiency Consultants on 01 2761428.

Yours sincerely,

Jonathan Dowling
On behalf of Tonge Industries Limited

PRODUCT DETAIL SHEET

RDM
40 years service to industry

"MODULAIR" DRYFILTER EXTRACTION BOOTHS

Introduction

These booths are designed to remove fumes from industrial environments such as paint spray shops, ensuring healthy and suitable working conditions and compliance with inspectorate requirements.
Special paper filters are used to which any sticky particles adhere, allowing a large volume of fume laden air to be extracted from the area.

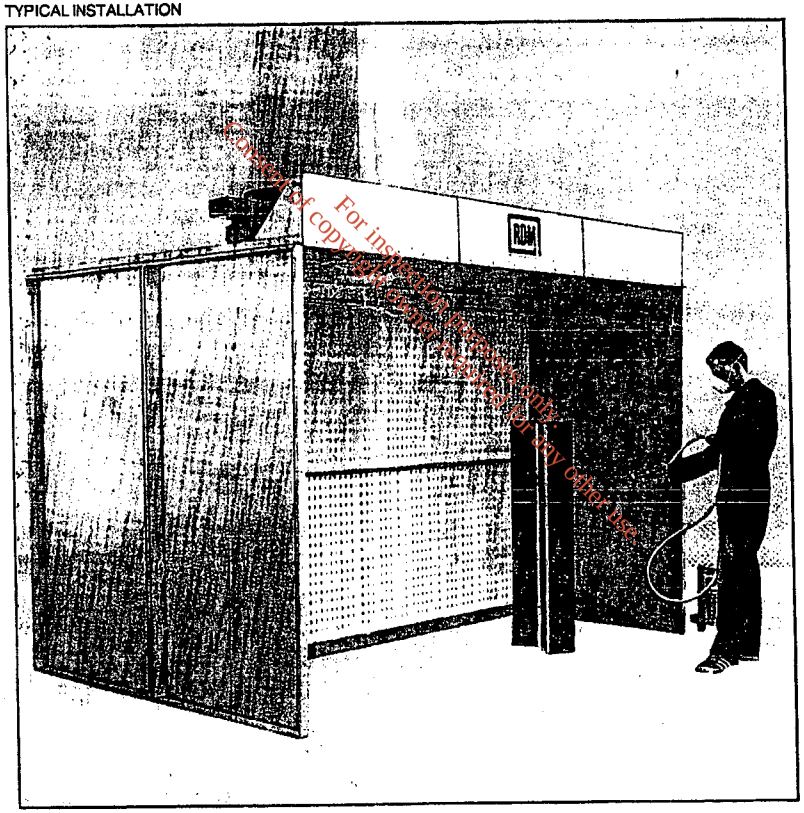
Applications

- Manual paint spraying
- Automatic paint spraying
- Polishing/finishing
- Adhesive spraying
- Fume extraction
- Air replacement

Features

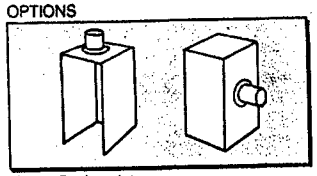
- Simple, economical maintenance. Replacement of disposable filters takes only a few minutes.
- Complies with all current recommendations and requirements
- All modular construction - any size or shape in 1 metre wide increments is possible.
- Prompt delivery
- Belt driven fans with external motors - flameproof or totally enclosed.
- Supplied complete with non-flameproof D.O.L. starter (s).
- Full carton (s) of highly efficient paper filters included as standard.
- Delivered in easy to assemble kit form made of all galavanised steel sections.
- Full assembly and installation service available.

TYPICAL INSTALLATION

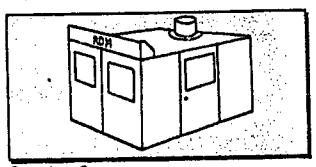


Model 3000B shown. Top outlet

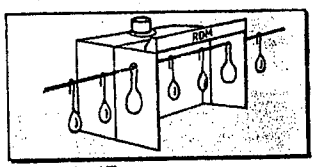
OPTIONS



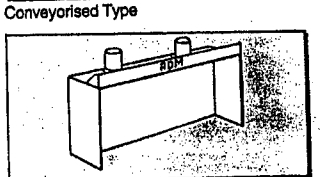
Top or Back outlet



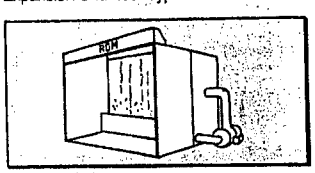
Complete Sprayrooms



Conveyorised Type



Expansion Chamber Type



Waterwash Booths
(See seperate detail sheet)

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Compliance Requirements for Waste Licence Application

Tonge Industries Ltd

EPA ref: W0239-01

Document number: 778-02

Tel: 353 1 276 1428 Fax: 353 1 276 1561 Email:energy@iol.ie

www.enviro-consult.com

Registered Office as above. Registered Number 243 412

QF 1. v2 Document Lead Sheet

Document Title	Compliance Requirements for Waste Licence Application
Project No.	778
Document No.	778-02
Client	Tonge Industries Ltd
Address	Unit 7, Cookstown Industrial Estate, Tallaght, Dublin 24

Issue	Status	Date	Author	Signed for and on behalf of	
				Environmental Efficiency	Client
1.00	Approved	25/01/2008	JD		

Where it is a requirement that this report be issued to a regulatory or other authority, then the client should sign the appropriate place in the above table and, unless specifically agreed in writing to the contrary, forward copies to the appropriate authority (e.g. EPA).

EEC Project Manager: Bob Sutcliffe, CEng, MIMechE
EEC Document Author: Jonathan Dowling BE, MSc

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2. Where this report is reproduced, it shall only be reproduced in full.
3. Reports remain the property of Environmental & Efficiency Consultants (Ireland) Limited until paid for in full.

Table of Contents

1 Introduction

The EPA requested Tonge Industries Limited (W0239-01) to supply information in order to comply with Article 9 and Article 12 of the Waste Management (Licensing) Regulations. The information is supplied in this document.

2 Article 12 Compliance

1. **Indicate whether the applicant or other relevant person has been convicted under the Waste Management Acts 1996 to 2003, the EPA Acts 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.**

   Simon Tonge (the applicant), Director, Tonge Industries Ltd or other relevant persons have not been convicted under the Waste Management Acts 1996 to 2003, the EPA Acts 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

2. **Provide information to demonstrate that energy will be used efficiently at the facility.**

   Electricity is the main form of energy used on site. Electricity is supplied by Airtricity. Forklift gas is also used.

   The main consumers of electricity are the following:

   a. The air compressor
   b. Lighting
   c. Heating

   The air compressor: The air compressor supplies compressed air to the air tools used in the dismantling area. These tools are only used during transformer dismantling. The compressor is maintained regularly. Leak checks are performed regularly. A copy of a maintenance report sheet is given in Appendix A.
   Lighting: It is necessary to use lighting throughout the year.
   Heating: Electric storage heaters in the offices are used during the winter months. There is no heating on the factory floor.

   A forklift is used to move bins of metals. Bins of metals are only moved when the bins are full, thus reducing the number of forklift trips.

   Tonge Industries reduced the size of their operation in 2007. Tonge significantly reduced the area of their site. The pyrolysis oven was decommissioned. The process of reclaiming metal and transformer oil was simplified, resulting in a more energy efficient process.

As part of the ISO 9001 Quality Management System, monthly electricity consumption is recorded and trends in consumption are assessed.

3. **Provide details of the location of a monitoring point for surface water run-off from the facility and proposals for sampling and monitoring of the surface water run-off.**

It is proposed to monitor the surface water run-off from the site at the final chamber of the interceptor. The surface water run-off goes a sewer located on First Avenue.
The final chamber of the interceptor is proposed due to:

a. There is no manhole/access to the outflow from the interceptor before it enters the sewer.
b. The outflow pipe from the interceptor is overlain with a thick layer of concrete.

The location of the monitoring point is shown on Map 3. The monitoring point has been called SW1.
It is proposed to take bi-annual water samples from SW1 and analyse the samples for COD and FOG.
A grab sample was taken from SW1 on 22 January 2008. The results of analysis are given in Table 3.

Emission Point:

Table 1Emission point data

Emission Point Ref. Nº:	SW1
Location of connection to sewer :	On First Avenue, approximately 5m from site boundary.
Grid Ref. (10 digit, 5E,5N):	30824E, 22858N
Name of sewage undertaker:	South Dublin County Council

Monitoring

Emission Point Reference No(s). : SW1

Table 2 Monitoring schedule

Parameter	Monitoring frequency	Accessibility of Sampling Points
COD	Bi-annual	
FOG	Bi-annual	

Monitoring Results

Table 3 Monitoring results

Monitoring Point	Parameter	Result
SW1	COD	52.8 mg/l
	FOG	<0.5 mg/l

4. Describe the proposed measures for the closure of the facility.

Site Closure Plan

A description of the procedures that will be implemented by Tonge Industries Limited in order to safely decommission all aspects of the installation is presented below.

a. Prior to the commencement of decommissioning activities, Tonge Industries will make an application to the Environmental Protection Agency to surrender the waste licence.

   While it is not envisaged that the operations at Tonge Industries Limited will lead to any deterioration of the environmental conditions on or under the site; the company is committed to ensuring that as far as is reasonable, the decommissioning of the site will return the site to its original condition. This will be carried out in a manner that will minimise any impact on the surrounding environment as agreed with the Environmental Protection Agency.

b. All metal and oil resulting from the dismantling of transformers will be removed from the site by licensed contractors.

c. The pipeline and bunded oil tank will be emptied. The pump that pumps oil from the dismantling area to the bunded oil tank will be decommissioned. The pipeline will be sealed and then removed and disposed of in a suitable manner. The bunded oil tank will be drained and decommissioned according to best practice.

d. All raw materials will be removed from the site.

e. All storage containers for chemicals will either be returned to the supplier or washed out and disposed of off site by a suitable waste contractor. All washings will also be disposed of off site.

f. The test cell will be decommissioned by suitably qualified personnel.

g. At all stages during decommissioning, environmental, health and safety procedures will be adhered to by Tonge Industries Limited employees and external contractors until the company has formally given up ownership and responsibility for the plant.

5. A revised non-technical summary is provided below:

Non-technical summary

Introduction
Tonge Industries Limited, Unit 7, First Avenue, Cookstown Industrial Estate, Tallaght, Dublin 24 are applying for a Waste Licence for their activity at the aforementioned premises.
Established in 1946, Tonge Industries Ltd is a recycling and transformer specialist company, recycling all metals and waste oil at its dedicated site. At the plant, hardware, such as transformers, sub-stations, regulators are dismantled and metals reclaimed and segregated. Oil from the equipment is sucked into a holding tank before being transported off site for recycling.
Tonge Industries has had a long running business relationship with the ESB, playing a pivotal role in its network renewal programme. It has been recycling and decommissioning ESB transformers since the mid-sixties.

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transformers are opened and the oil is sucked out. The oil is stored in a bunded tank. Metals with an oily residue are stored in a sump to allow any oil on the metal to drain off. The rest of the metals are separated using air tools. The metals and the oil are taken off-site by a licensed contractor. Approximately 625 tonnes of metal and 600,000 litres of oil (approx. 510 tonnes) are recovered per annum.

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5. All storage containers for chemical will either be returned to the supplier or washed out and disposed of off site by a suitable waste contractor. All washings will also be disposed of off site.
6. The test cell will be decommissioned by suitably qualified personnel.

3 Article 9 Compliance

A notice was submitted to the Planning Authority in order to comply with Article 9(2) of the Waste Management (Licensing) Regulation. A copy of the notice is given in Appendix B.

Appendix A

Tonge Industries Ltd. Maintenance Report Sheet Month:

Please tick the appropriate area where problem exists

	Maintained	Cleaned	Date
Indoor Engineering/Grid			
Indoor Floor A			
Indoor Floor B			
Office			
Outdoor Loading Area/Front			
Outdoor Loading Area/Side			
Forklift 1.7 Tonne			
Forklift 4 Tonne			
Van			
Equipment - Type_____			
Compressor			
Store Room			
Interceptor			
Shores			
Long Drains			

Please give brief description of problem and specific location involved

Work: _____

	Comment

Completed by: _____

Date: _____

Received by: _____

Appendix B

Environmental Efficiency
Consulting Engineers

Parnell House,
19 Quinsboro Road,
Bray Co Wicklow,
Ireland.

3 January 2008

Planning Department
South Dublin County Council
County Hall
Tallaght
Dublin 24

Re: Notification of the Application to the Environmental Protection Agency for a Waste Licence

Dear Sir/Madam

Tonge Industries Ltd, Unit 7, Cookstown Industrial Estate, Tallaght, Dublin 24 (National Grid Reference 2286E, 3082N) has applied to the Environmental Protection Agency for a waste licence for their transformer repair and recycling facility at the same address.

The activities belong to the classes described in the fourth schedule of the Waste Management Acts, 1996-2003 as:

Principal activity:

3. Recycling or reclamation of metals and metal compounds.

Other Activities:

8. Oil re-fining or other re-uses of oil.

The quantities of materials recycled are as follows:

Quantity of metals recycled: 625 tonnes/year.

Quantity of oil recycled: 600,000 litres/year.

A copy of the application for the waste licence and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application may be inspected at or obtained from the headquarters of the Environmental

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Ireland

Protection Agency as soon as is practicable after the receipt by the Agency of the application for this licence.

If you have any question I can be contacted on 01 2761428 or jdowling@energy.iol.ie.

Yours sincerely,

Jonathan Dowling
On behalf of Tonge Industries Ltd

Tel: 353 1 276 1428 Fax: 353 1 276 1561 Email:energy@iol.ie

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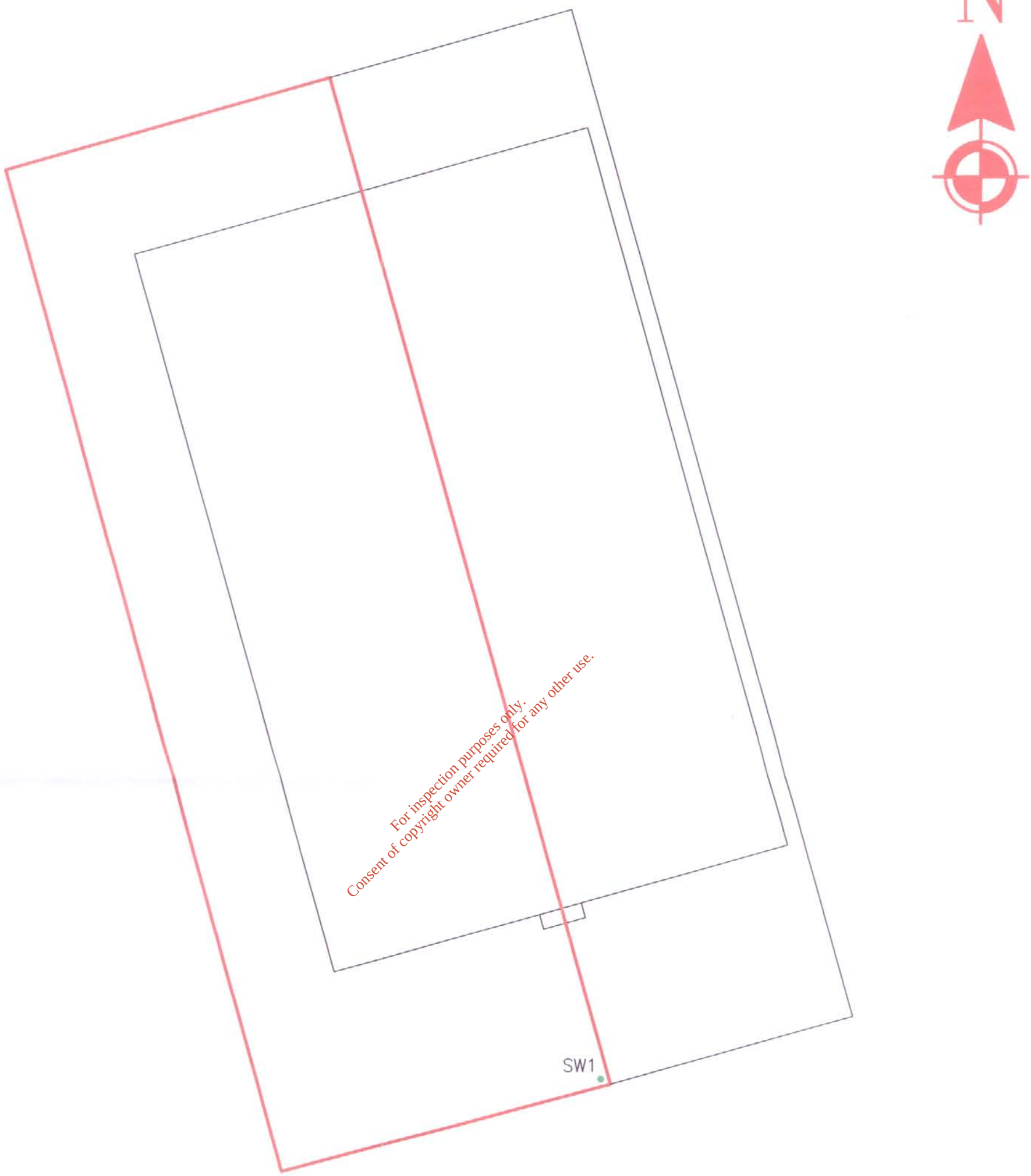

Site: Tonge Industries
Unit 7, Cookstown Ind
Est, Tallaght, Dublin 24

Drwg No.: Map 3
Drawn: JD
Date: 8 January 2008

Title: Site Layout
Scale: 1:300
Site outlined in red
Surface water monitoring location:
SW1

Environmental Efficiency
Consulting Engineers

Environmental Efficiency Consultants (Ire) Ltd.
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Email: energy@iol.ie
Web: www.environ-consult.com