



## **ANNUAL ENVIRONMENTAL REPORT 2009**

<b>License Register Number</b>	<b>W0219-01</b>
<b>License</b>	<b>Organic Gold (Marketing) Ltd.</b>
<b>Location</b>	<b>Wilkestown Navan Co. Meath</b>
<b>Report Year</b>	<b>2009</b>

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# 1.0 Introduction

## 1.1 Background to Organic Gold

Organic Gold is an established waste facility located in Wilkinstown, Navan, Co. Meath. Organic Gold has been involved in waste activities at the site since 1986. There are two different waste activities at the site:

- 1) The production of high grade fertiliser in the fertiliser production shed; and
- 2) Composting of organic waste.

Organic Gold obtained a waste licence from the Agency in April 2007 to compost up to 25,000MT per annum. The existing premise has a capacity to store 5,000MT of organic material. There are ongoing plans to develop the new state of the art 25,000MT per annum compost. Organic Gold has been liaising with the Department of Agriculture and Food to obtain approval to accept animal by-products at the new facility.

Mr. John Finnegan is the experienced manager at Organic Gold. The facility currently employs 2 No. staff directly and is operational for approximately 48 weeks of the year. The current normal hours of operation are 8.00 to 18.00 Monday to Saturday. Production at the facility is intermittent depending on demand for products.

## 1.2 Reporting Period

This Annual Environmental Report (AER) is for the period between 01/01/2009 to the 31/12/2009.

## 1.3 Waste Activities

Organic Gold waste licence allows the following Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2005:

<b>Class</b>	<b>Description of Licensed Waste Activities</b>
<b>Class 2.</b>	<b>Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).</b>
<b>Class 4.</b>	<b>Recycling or reclamation of other inorganic materials.</b>
<b>Class 11.</b>	<b>Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 12.</b>	<b>Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 13.</b>	<b>Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.</b>

## 2.0 Waste Management Record

A total of 515 tonnes of waste was accepted for composting at the facility in 2009. The waste licence for the facility allows for a maximum tonnage of 25,000 tonnes per annum.

The Table 1 below provides a breakdown of quantity and waste types received in 2009.

<b>EWC Code</b>	<b>Waste Description</b>	<b>MT 2009</b>	<b>MT 2008</b>	<b>MT 2007</b>
02 01 06	Dewatered cattle slurry	165	443	321
20 01 99	Brewers grains	350	146	121
19 12 07	Timber C&D waste	0	121	1,015
<b>TOTAL</b>		<b>515 MT</b>	<b>710 MT</b>	<b>1,457 MT</b>

**Table 1 Waste accepted breakdown**

Other products were accepted at the facility in 2009 which included c.100MT of peat and c.20MT of lignite. In 2009 there was no residual waste disposed off site. There were also no rejected or quarantined waste consignments in 2009.

## 3.0 Resource Consumption Summary

### 3.1 Energy

The main energy users on site are the plant onsite (generator, tractors and loading shovel), the blending machine and the packaging plant. The energy consumed at the facility is summarised in Table 2 below.

Energy Consumption	2009	2008	2007
Electricity (kW)	5766	7094	7333
Diesel (litres)	7904	8562	9790

**Table 2 Energy Consumption summary**

Electricity consumption has decreased by 18.7% while diesel consumption has decreased by 7.7% when one compares the 2009 and 2008 energy consumption figures. The energy reduction is mirrored with the reduction in output from the facility in 2009.

### 3.2 Water Consumption

Water is provided by via an existing borehole onsite. Water usage at the site is only used for the staff canteen and toilets at the site. This water usage is not metered at present. No water is used during the production processes.

## 4.0 Environmental Management

### 4.1 Schedule of Environmental Objectives & Targets

#### Environmental Objectives & Targets 2010-2015

Objectives	Date	Targets
1. Develop the new modern compost facility	2010-2012	Have the new compost facility with 25,000 MT capacity operational in 2012.
2. Full waste licence compliance	2010- 2015	Consistent waste adherence by means of: <ul style="list-style-type: none"> <li>• Ongoing environmental audits and monitoring.</li> <li>• Regular environmental team meetings.</li> <li>• Strive towards to continual environmental improvement.</li> </ul>

### 4.2 Environmental Management Programme- Report 2009

No Environmental Management Programme (EMP) 2009 was proposed in 2008 due to the fact that the planned expansion was taking priority.

### 4.3 Environmental Management Programme- Proposal 2010

The proposed EMP in 2010 is outlined below. The main element of the plan for 2010 is to meet the current waste licence requirements.

Target	Action	Responsibility	Timeframe
1. Carry out a hydrological investigation	-Appoint an independent consultant -Agree scope of study with the Agency -Carry out the hydrological investigation -Implement any recommendations of the report	John Finnegan	By the end of 2010
2. Well protection	Appoint contractor to put in place a lockable cap on the borehole on site	John Finnegan	By end of August 2010
3. Waste management records	Ensure that monthly waste records are retained at the facility at all times	John Finnegan	By end of August 2010
4. Noise monitoring	Carry out noise monitoring at the facility in 2010	John Finnegan	By end of August 2010
5. Zero Environmental Complaints	Continue open communications with neighbours.	John Finnegan	2010
6. Seek approval from the Agency for the proposed 25,000 MT facility	-Submit proposal with final plans and layout maps. -Construction will not commence without Agency approval.	John Finnegan	By the end of 2010

## 5.0 Other

### 5.1 Emissions from the facility and ambient monitoring

No emissions or ambient monitoring was undertaken in 2009 due to limited scale of activities on site at present. It is envisaged that once the new proposed facility is fully operational that full ambient and emission monitoring will be carried out in line with the following monitoring schedules outlined in Organic Gold's waste licence:

- Schedule C.1.2 (air),
- Schedule C.2.3 (storm water)
- Schedule C.5 (noise)
- Schedule C.6 (dust)
- Schedule C.8 (groundwater)

Some past monitoring data from the site EIS 2005 is provided below. It is considered that emission levels at the current facility would be much lower than those presented in the EIS as the compost facility was fully operational with open windrows in the yard at the time of the monitoring.

Boundary Location	Monitoring Period	Total Dust Deposition (mg/m <sup>2</sup> /day)	TA Luft Guideline Value (mg/m <sup>2</sup> /day)
DG1	21/04/04-11/05/04	222.9	350
DG2	21/04/04-11/05/04	49.9	
DG3	21/04/04-11/05/04	218.2	
DG4	21/04/04-11/05/04	328.8	

Table 3 RPS Dust Monitoring Results 2004 (Method- VDI 2119 sheet 2)

Location	Mesophilic bacteria (cfu/m <sup>3</sup> )	Aspergillus Spp. (cfu/m <sup>3</sup> )
B1	2.36 x10 <sup>2</sup>	2.36x10 <sup>3</sup>
B2	9.42x10 <sup>1</sup>	No growth
B3	2.36x10 <sup>1</sup>	No growth
B4	No growth	No growth
B5	3.5x10 <sup>3</sup>	7.07x10 <sup>3</sup>
B6	1.4x10 <sup>2</sup>	2.36x10 <sup>3</sup>
B7	1.9x10 <sup>2</sup>	2.36x10 <sup>3</sup>

Table 4 RPS Bioaerosol monitoring 06/12/04

Parameter	Concentration (mg/l)	Interim Guideline Values (mg/l)
Boran	<0.1	1
Cadmium	0.0005	0.005
Chromium	<0.005	0.03
Copper	0.02	0.03
Lead	0.007	0.01
Magnesium	33	50
Mercury	<0.00005	0.001
Zinc	0.075	0.1
Calcium	229	200
Chloride	11.2	30
Coliforms (cfu/100ml)	228.2	0
Nitrate	0.62	25
Sulphate	195.6	200
Potassium	31	5
Sodium	39	150
Conductivity (ms/cm)	1.5	1
pH (pH units)	7.26	>6.5 & <9.5

**Table 5 RPS groundwater of well in lower yard 12/08/10**

Location	L <sub>Aeq</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Boundary N1 day	62	67	42
Boundary N2 day	63	68	35
Boundary N3 day	52	55	42
Boundary N4 day	64	64	43
NSL1 day	69	72	35
NSL1 night	67	68	39
NSL2 day	65	64	27
NSL2 night	71	74	47

**Table 6 RPS Noise monitoring survey 21/04/04 & 11/05/04**



## **5.2 Environmental Complaints**

No third party environmental complaints were received in 2009 by Organic Gold.

## **5.3 Reported incident summary**

No incidents occurred in 2009 at Organic Gold.

## **5.4 Tank and pipeline testing and inspection report**

There has been no tank integrity assessments carried out at the facility since the site obtained the waste licence. Diesel fuel at the facility is stored in a self bunded tank. All oils and chemicals are stored on spill deck within an enclosed shed.

It is envisaged that any new tank, there bunds and pipelines will be integrity tested/assessed upon installation at the new compost facility.

## **5.5 Energy efficiency audit report summary**

No energy audit has been undertaken at the facility since the site obtained the waste licence. It is envisaged that a comprehensive energy audit will be commissioned once the new compost facility is operational.

## **5.6 Odour Management Plan**

An odour management plan for the existing facility is in place. Currently all composting takes place in a covered shed. There is a mist air system in place in the lower yard however the system is not currently utilised given to the fact that the lower yard is currently not utilised. It is envisaged that the existing odour management plan will be revised and updated once the new compost facility is operational.

## **5.7 Report on the assessment of the efficiency of use of raw materials in processes and the reduction of wastes generated**

Currently all raw materials are fully utilised at the facility. No wastes were generated at the facility in 2009. It is envisaged that an assessment of the efficiency of use of raw materials in processes and the reduction of wastes generated will be completed once the new compost facility is operational.

## **5.8 Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharge**

Currently water demand at the facility is minimal and is limited to the staff canteen and toilets. No water is currently used for used as part of the production. It is envisaged that once the new facility is operational that proposals will be developed to minimise water demand at the facility.

There is currently no trade effluent being discharged from the facility.

## **5.9 Development/infrastructural works summary (completed in previous year or prepared for current year)**

There was no development or infrastructural works carried out in 2009. It is envisaged that final plans and layout maps for the proposed facility will be forwarded to the Agency for approval once finalised.

## **5.10 Reports on financial provision made under this licence, management and staffing structure of the facility and a programme for public information**

### Financial Provision

It is envisaged that once the new facility is operational that the financial provisions will be reviewed.

### Organisation Chart for Environmental Management

The Management Team at Organic Gold is detailed below-

- 1) General and Environmental Manager- Mr. John Finnegan
- 2) Plant Manager- Mr. Tony Finnegan

### Programme for Public information

The facility has a notice board located at the entrance of the facility (in accordance with Condition 3.13). Furthermore, an EPA/Public record is open for inspection at the facility office.

## **5.11 Closure, Restoration and Aftercare Management Plan**

No Closure, Restoration and Aftercare Management Plan (CRAMP) has been completed to date. It is envisaged that the CRAMP will be completed once the new facility is operational.