This report has been cleared for submission to the Board by Frank Clinton, Programme Manager. Signed <u>Brz Rocc</u> Date <u>261112012</u>



# OFFICE OF CLIMATE, LICENSING & RESOURCE USE

# INSPECTORS REPORT ON A LICENCE APPLICATION

TO:	DIRECTORS	
FROM:	Caroline Connell	- Licensing Unit
DATE:	24 January 2012	
RE:	Application for a waste Licence from Murray Waste Recycling Ltd., Coolatore, Ferns, County Wexford, Licence Register W0258-01	

Application Details						
Type of facility:	Non-Hazardous Materials Recovery Facility					
Class(es) of Activity ( <b>P</b> = principal activity):	3 <sup>rd</sup> Schedule: D13, D14, D15. 4 <sup>th</sup> Schedule: R3, R4, R5 (P), R11, R12, R13.					
Quantity of waste managed per annum:	24,500 tonnes					
Classes of Waste:	Household, commercial, construction & demolition and industrial non-hazardous solid wastes.					
Location of facility:	Coolatore, Ferns, County Woxford	Scanned 3 1 JAN 2012				
Licence application received: Third Party submissions:	11 February 2009 None	Open Web Doc Initials:				
EIS Required:	No					
Article 14 Notices sent: Article 14 compliance date:	10 August 2011 & 27 October 2011 4 January 2012					
Site Visit:8 April 200916 December 2011						

# 1. Facility

Murray Waste Recycling Ltd. (MWR) operates an existing waste transfer station at Coolatore, Ferns, Co. Wexford. The facility was constructed on a 2.4 hectare greenfield site in 2005 having attained planning permission from Wexford County Council. Waste acceptance at the facility commenced in September 2005. The applicant was granted further planning permission in August 2009 for an extension to the existing recycling building and associated site infrastructure for which construction is due to be completed by the end of 2012. The existing facility operates under a waste facility permit from Wexford County Council (WP/08/23).

Murray Waste Recycling Ltd. applied for a licence to accept 24,500 tonnes of waste per annum, a level of intake that is less than the 50,000 tonnes per annum threshold for a waste facility permit. However, the applicant has predicted that the percentage of residual waste consigned from the facility for disposal will exceed 15%, the threshold permitted under a permit. As such, Murray Waste Recycling Ltd. requires a waste licence from the Agency.

The location of the facility is in the townland of Coolatore and is approximately 2.5km southeast of Ferns town on the R745 (Figure 1). The facility is situated in a rural context and surrounding land use is predominately agricultural. There are five residential properties within 75 metres northeast and east of the facility with the closest house being less than 25 metres northeast of the facility (see Appendix 1). The River Bann is located approximately 1km west of the facility at its nearest point. A small drain runs along the northern boundary of the facility and Wexford County Council confirmed that there is a good level of water in this drain all year. After approximately 1.6km this drain discharges into the River Bann downstream of Milltown (see Figure 1). The River Bann has been included in the Slaney River Valley candidate Special Area of Conservation (cSAC) (site code 000781).





There is a staff complement of approximately seventeen people employed at the facility. The main infrastructure at the facility includes: an office, a weighbridge, a recycling building (currently being extended), an area designated for a civic amenity facility (not in use) and an area designated for the outdoor processing of

construction & demolition (C&D) waste (see Appendix 2). The waste types accepted at the facility include household, commercial, C&D and industrial non-hazardous solids. The facility is currently permitted to accept waste "...only between the hours of 0800 to 1800 Monday to Friday, 0800 to 1300 Saturday", as per the waste facility permit issued by Wexford County Council<sup>1</sup>.

# 2. **Operational Description**

Murray Waste Recycling Ltd. provides skips for hire to domestic, commercial, industrial and C&D markets. Waste is also accepted from other skip operators, refuse collection vehicles and Wexford County Council. The waste accepted is: mixed dry recyclables, segregated recyclables, segregated municipal biowaste, municipal solid waste (MSW) and C&D waste. Table 1 below shows the breakdown of waste proposed for acceptance at the facility and this is reflected in *Schedule A.2: Waste Acceptance* of the Recommended Decision (RD).

Table 1:

	Waste Type	Maximum (Tonnes Per Annum)
Non- Hazardous Wastes	Mixed Dry Recyclables	4,800
	Source Separated Recyclables	5,780
	Source Separated Biowaste	1,680
	Municipal Solid Waste	7,200
	Construction & Demolition Waste	5,040
Non-Hazardous Waste Total		24,500

On arrival at the facility all vehicles are directed to the weighbridge near the entrance. The waste is inspected at the weighbridge and again inside the recycling building after off-loading. Any waste found to be unsuitable is sent to the waste quarantine area.

Mixed dry recyclables, source segregated recyclables and source separated biowaste<sup>2</sup> are sorted mechanically and/or manually. The different fractions recovered (cardboard, paper, plastic, rubber, metal, glass, timber, textiles and compostable wastes) are bulked up for removal to another facility.

Municipal solid waste is not treated on-site; it is bulked up only while awaiting removal to a Solid Recovered Fuel (SRF) facility. Residual waste from sorting operations is also sent for SRF manufacture. Condition 6.19.1 limits the storage of putrescible waste to less than 48 hours.

C&D waste is unloaded inside the recycling building. Larger pieces suitable for recovery are removed by a mechanical grab and smaller pieces are handpicked. Timber, concrete and rubble are moved outdoors for shredding, crushing and

<sup>&</sup>lt;sup>1</sup> The waste facility permit states hours of waste acceptance for the facility only, it has not specified hours of operation.

<sup>&</sup>lt;sup>2</sup> Section 5 (1) of the Waste Management Acts 1996 to 2011 defines bio-waste as "*biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants"*.

screening. It has been proposed that the crusher and screener will be used approximately 2 days per month and the wood shredder for 2 days per week.

Currently only wood and rubble are stored outdoors. Condition 8.2 states that only non-putrescible waste material is to be stored outdoors and only if:

- the integrity or value of any mechanically recovered waste produced at the facility does not diminish, and
- outdoor storage does not lead to nuisance emissions including dust and odour.

Table 2 below outlines the current, proposed and recommended hours of operation and waste acceptance for the facility.

Authorisation Type	Hours of Operation	Hours of Waste Acceptance	Limitations
<b>Current:</b> Waste Facility Permit (WP/08/23)	Not specified	0800 – 1800 Monday to Friday 0800 – 1300 Saturday	No operation or waste acceptance on Sundays or Bank Holidays.
Current: Planning Permission (reg. no. 20090181)	0800 – 2200 Monday to Saturday	0800 – 2200 Monday to Saturday	No operation or waste acceptance on Sundays or Bank Holidays.
<b>Proposed:</b> Hours proposed in the application	0630 – 2100 Monday to Saturday (including Bank Holidays)	0730 - 2000 Monday to Saturday (including Bank Holidays)	No operation or waste acceptance on Sundays.
Recommended: Hours proposed in the RD	0630 - 2100 Monday to Saturday Note 1	0800 – 2000 Monday to Saturday	No operation or waste acceptance on Sundays or Bank Holidays.

Table 2: Hours of operation and waste acceptance

**Note 1:** Condition 1.7.1 of the RD states that all operations at the facility during night-time hours shall take place indoors.

There are five residential properties within 75m northeast and east of the facility. There were no submissions in relation to noise or nuisances arising from the operation of the facility, nor has the local authority received any complaints. As such Condition 1.7 of the RD reflects the recommended hours in Table 1 above. It is proposed to restrict commencement of waste acceptance each morning to daytime hours.

# 3. Use of Resources

Fuel

Diesel is used to fuel the plant and the trucks servicing the facility. Approximately 147,379 litres of diesel is used per annum at the facility. Approximately 2,000 litres of heating oil and 1,904 litres of hydraulic engine oil are used yearly.

Condition 3 of the RD specifies requirements for the bunding of tank, container and drum storage areas.

<u>Electricity</u>

The facility uses approximately 28,751kWh of electricity each year.

<u>Water</u>

Water is sourced from an on-site groundwater well (Well No. GW3, Appendix 3).

# 4. Emissions

# 4.1 <u>Air</u>

There is potential for dust emissions to atmosphere from outdoor wood shredding and C&D processing.

The results of dust monitoring from August 2008 submitted with the application taken at monitoring locations D1 and D2 (Appendix 3) were under the 350 mg/m<sup>2</sup>/day dust deposition threshold specified in the facility's waste facility permit.

In order to minimise dust generation all areas leading into and around the recycling building have been or are proposed to be concreted. Roads and hardstanding areas will be cleaned regularly using a multi-sweeper with a dust suppression system. Vehicle speed restrictions are in place to minimise dust generation.

Condition 8.1 of the RD authorises the continued operation of an outdoor wood shredder and a C&D waste crusher and screener. All other recovery operations are carried out within the recycling building. Condition 3.10 states the minimum infrastructural requirements for areas in which timber and C&D waste recovery takes place and these are to be provided within six months from the date of grant of the licence. These measures specify that all stockpiles shall be adequately contained to minimise dust generation and that there shall be appropriate arrangements on operating equipment to contain and restrict dust emissions. Condition 6.20.5 states that the wood shredder, the C&D waste crusher or the C&D waste screener shall not be operated when wind speeds exceed 10.7 m/s (Force 5).

There is potential for odour generation from the storage of municipal solid waste, compostable waste and residual waste. Odour is currently controlled in the recycling building with odour neutralising spray mist. Waste is removed from site every two days in order to minimise odour generation.

Condition 3.12 of the RD requires the installation of a dust and odour management system within twelve months of the date of grant of the licence. The system is to include dust curtains (or an agreed alternative), negative air pressure in the recycling building where putrescible waste is being handled and the treatment of ventilated gases by a biofilter.

*Schedule B.5: Ambient Air Limits* specifies total dust deposition emission limits. *Schedule C.6.1: Ambient Monitoring* outlines dust deposition monitoring requirements.

# 4.2 Emissions to sewer

There is no connection to the sewer at the facility.

Sanitary effluent generated on-site is directed to a sludge settlement tank. The effluent from the sludge settlement tank is routed to an oil/water interceptor and this discharges to a Bio-Crete wastewater and sewage treatment system. The effluent from this treatment system discharges to a raised percolation bed (see Appendix 2).

Concerns arising from the raised percolation bed area are addressed below in section 4.4.

#### 4.3 Emissions to surface waters

There are no process emissions to surface waters.

### 4.4 <u>Storm water run-off</u>

Rain water falling on hardstanding areas is directed to an oil/water interceptor prior to discharge to the drain running along the northern boundary of the facility at emission point SW3 (see Appendix 3). Rainfall from the roof of the recycling buildings is discharged directly to the drain without treatment. Condition 3.20 of the RD requires that all discharges, with the exception of those from roofs, pass through an oil interceptor and silt trap prior to discharge.

Results from monitoring on three occasions in 2008 supplied with the application suggests that when comparing SW3 to upstream water quality data that periodically there have been slightly raised levels of ammoniacal nitrogen at SW3. Levels of total coliforms and faecal coliforms detected at SW3 exceed those levels detected upstream.

During a site visit carried out on the 16 December 2011 it was noted that there was water pooling in places at the rear of the site. The following pool of liquid was noted in the area (less than 20m) between the raised percolation bed and the drain:



Figure 2: Liquid pooling behind the percolation area.

This suggests that the percolation area located upstream of SW3 might not be operating effectively. However, during the site visit it was also noted that a field drain from neighbouring agricultural land flows into the drain at a location directly opposite SW3.

Figure 3: The location of storm water emission point SW3



The most likely sources of coliform contaminants are the percolation area or the neighbouring field drain.

Condition 3.9.1 of the RD requires the licensee to demonstrate that the percolation area satisfies the criteria set out in the *Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e < 10)*, is operating correctly and is not impacting on surface water quality.

*Schedule C.2.3: Monitoring of Storm Water Emissions* requires monitoring to be carried out for faecal and total coliforms on a quarterly basis at SW3 to confirm on an on-going basis whether faecal and total coliforms are discharged. *Schedule B.6: Storm Water Emissions* specifies emission limit values for Chemical Oxygen Demand (COD) (40 mg/l) and suspended solids (35mg/l) at SW3.

#### Firewater Retention

The firewater retention tank (Appendix 2) is due to be installed in April 2012. This tank will be filled by rain water from the roof of the recycling buildings. The rain water which overflows from the firewater retention tank will discharge directly to the drain on the northern boundary of the facility. Condition 3.21 requires the licensee to install a fire-water retention facility within six months of the date of grant of the licence.

# 4.5 <u>Wash down water from the recycling buildings</u>

The installation of a wash-down water collection system and storage tank is due to be completed by February 2012. This storage tank will take wash down water from the recycling buildings at the points shown below in figure 4. The wash down water drainage system in the recycling building will be isolated from the storm water drainage network. Wash down water will be removed from the storage tank periodically and transported to a waste water treatment plant.

Condition 6.20 requires the applicant to wash down the floor of the recycling building on a weekly basis and any floor areas which have come into contact with putrescible waste on a daily basis. Condition 3.9.2 requires the applicant to have the wash down water collection system and storage tank installed within six months from the date of grant of the licence.



Figure 4: Wash down water management system.

#### 4.6 Emissions to ground/groundwater

There are no direct emissions to ground/groundwater.

The diesel tank at the facility is bunded.

The groundwater body at the facility is classified, under the Water Framework Directive, as 'good', the overall status is 1(a) 'at risk of not achieving good status' and the overall objective is 'protect' (www.wfdireland.ie).

There are three groundwater wells at the facility (see Appendix 3). GW1 and GW2 are monitored as part of the facility's waste facility permit. GW3 is listed as the facility's sole water source.

Groundwater monitoring results were provided for monitoring undertaken at GW1 and GW2 in 2006, 2007 and 2008. Elevated levels of manganese and total coliforms were detected. Manganese is found widely in soils and is often a constituent of aroundwaters. Faecal coliform results were <1CFU/100ml at both GW1 and GW2 and while total coliforms were higher, this is most likely due to high levels of non-faecal bacteria in the soil. The applicant confirmed in Section I.5 of the application that "...impact on ground and/or groundwater has not been noted on site since monitoring commenced".

Condition 6.14 requires a comprehensive hydrogeological investigation to be completed within twelve months of the date of grant of the licence. Schedule C.6.2 of the RD requires the three wells to be monitored biannually.

#### 4.7 Noise

The noise sources at the facility include delivery vehicles and on-site machinery including a wood shredder, baler, trommel, picking line and C&D recovery plant.

Results from noise monitoring completed in January and September 2008 was submitted for noise sensitive monitoring locations NS1 and NS2 (see Appendix 3). The results of this monitoring met the requirements of the waste facility permit threshold for daytime noise emissions (55dB(A) LAeq) in all but one case. One reading was slightly over the emission limit value; however, this was attributed to vehicle noise coming from the road. Neither the applicant nor Wexford County Council have received any complaints in relation to noise from this facility.

*Schedule B.4 Noise Emissions* of the RD specifies daytime and night-time noise emission limit values and *Schedule C.5 Noise Monitoring* requires noise levels from the facility to be monitored on an annual basis at noise sensitive locations.

# 4.8 <u>Nuisance</u>

The RD requires daily inspections of the immediate surrounds for nuisances (Condition 6.22). The RD also requires that vermin, birds, flies, mud, dust and litter associated with the activity do not result in an impairment of the amenities or the environment at the facility or beyond the facility boundary (Condition 5.4).

### 4.9 <u>Wastes generated & materials handling</u>

Small quantities of municipal waste are generated in the office, canteen and staff welfare facilities. This waste is recovered on-site as far as possible and the remaining waste is added to the waste collected at the facility for disposal.

The oil interceptor will be routinely cleaned and emptied (Condition 6.11 requires weekly inspection and desludging as necessary), and the contents removed off-site for treatment.

Condition 8 of the RD specifies requirements for materials handling and waste sent off-site for further treatment. Indoor storage of materials for recovery will help to ensure the recyclability of the materials. The applicant will report to the Agency on an annual basis on the achievement of the waste recovery targets.

# 5. Waste Management, Air Quality and Water Quality Management Plans

The proposed development of the recycling facility to increase its waste acceptance from 21,000 tonnes per annum to 24,500 tonnes per annum is in line with the policies and objectives of the "Joint Waste Management Plan for the South East 2006 - 2011" and is contributing to meeting the waste recovery and recycling targets set out by the plan.

# 6. Environmental Impact Statement (EIS)

# Environmental Impact Assessment Directive (85/337/EEC)

An Environmental Impact Statement (EIS) was not submitted with the application. The licence application is for a project that is below the mandatory threshold for EIA under the EIA Regulations (S.I. No. 389 of 1989, as amended). It has been confirmed by the applicant and the Planning Authority that no EIS was required in relation to planning permission granted for the activity (reference number 20090181).

Planning permission took into consideration the waste licence application requesting a maximum waste acceptance of 24,500 tonnes per annum for recovery.

# 7. Compliance with Directives/Regulations

The facility does not fall under the scope of the IPPC, Landfill or Seveso Directives.

#### Water Framework Directive [2000/60/EC]

There are no process emissions to surface water of environmental significance from this facility. The conditions included in the RD have been developed to prevent any significant impact on water quality from the facility, and in particular surface water and groundwater quality. *Schedule C: Control and Monitoring* of the RD outlines the requirements for the monitoring of storm water emissions and groundwater monitoring.

*European Communities Environmental Objectives (Ground Water) Regulations, S.I. No. 9 of 2010* 

Condition 5.6 of the RD requires that there are no direct emissions to groundwater. Condition 3.9.1 requires the applicant to maintain the wastewater treatment plant and percolation area in order to satisfy the criteria set out in the *Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e \leq 10)*, published by the EPA in 2010. *Schedule C.6.2 Groundwater Monitoring* requires monitoring at three on-site groundwater wells.

Environmental Liabilities Directive (2004/35/EC)

The activities at the facility fall under the scope of the Directive (Schedule 3 Interpretation 2(b)(i) *Waste management operations including – collection, transport, recovery and disposal of waste and hazardous waste*).

The RD requires the preparation of an Environmental Liabilities Risk Assessment and making of financial provision against potential environmental liabilities. The RD generally imposes a preventive approach to environmental protection and requires that any environmental incidents are reported to the Agency.

Habitats Directive (92/43/EC), Birds Directive (79/409/EEC) and EC (Birds and Natural Habitats) Regulations 2011

A drain with a good level of water is situated along the northern boundary of the facility and in approximately 1.6km discharges into the River Bann. The River Bann has been included in the Slaney River Valley cSAC. The applicant has completed the stage 1 screening for appropriate assessment and it was concluded that a stage 2 assessment was not required as it was not considered likely that the facility will impact on the Slaney River Valley cSAC.

#### 8. Liaison

I consulted with Ms Pamela McDonnell, Licensing Inspector, with regard to the applicant's and Planning Authority's confirmation that an EIS is not required for this activity.

I consulted with Ms Siobhán Murphy, Wexford County Council, in relation to the facility's complaint history, enforcement history, monitoring results and the security payment required by Section 12.3 of the waste facility permit.

#### 9. Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Decision comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

# **10.** Fit & Proper Person Assessment

The 'Fit & Proper Person' assessment requires three areas of examination:

(i) Technical Ability

Mr Michael Murray (Managing Director) has been operating this facility since September 2005 under the authorisation of Wexford County Council. Mr Murray and two others have completed a FÁS waste management training programme.

The applicant has confirmed that staff performing duties which involve site inspections or the interpretation of monitoring results receive the appropriate training prior to carrying out such duties. Staff are also provided with training in their individual areas of activity which comprises theoretical and practical training sessions. All training received is recorded in individual training files.

# (ii) Legal Standing –

Mr Michael Murray was successfully prosecuted by Wexford County Council under the Waste Management Acts for activities relating to the holding of waste at Tomsallagh, Ferns, Co. Wexford in 2004. Mr Murray pleaded guilty. Wexford County Council issued a notice under Section 55 of the Waste Management Acts 1996 to 2011 in relation to this issue which has since been closed. Waste activities that had been carried out in Tomsallagh ceased. The nearby Coolatore facility commenced waste operations in 2005 after planning permission and a waste facility permit had been attained.

### (iii) Financial Standing –

The applicant has confirmed that Murray Waste Recycling Ltd maintains its accounts in accordance with the requirements of the State and knows of no financial discrepancies associated with its business.

The waste facility permit granted by Wexford County Council requires the permit holder to provide a cash deposit or a bond of an insurance company or other security in the amount of  $\in$ 35,000. Wexford County Council confirmed that Murray Waste Recycling Ltd. has not satisfied this condition.

Condition 12.2 of the RD proposes that the licensee is to submit an Environmental Liabilities Risk Assessment to the Agency for agreement within six months of the date of grant of this licence.

The legal, technical and financial standing of the applicant qualifies them to be considered Fit and Proper Persons.

# **11. Complaints**

Both the applicant and Wexford County Council confirmed that they have not received any complaints with regard to the recovery activities carried out by Murray Waste Recycling Ltd. at their facility at Coolatore, Ferns, Co. Wexford.

# **12.** Activities Refused

Disposal class D8 "*Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12"* of the Third Schedule of the Waste Management Acts 1996 to 2011 has been refused in Part II of the RD as this activity does not take place at the facility.

# **13. Recommended Decision**

Wexford County Council issued a notice under Section 55 of the Waste Management Acts 1996 to 2011 to Murray Waste Recycling Ltd. in October 2008 and instructed the company to cease the acceptance of wastes which are not permitted under their waste facility permit. Wexford County Council confirmed 23 January 2011 that this notice has not been closed out. I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of the activities in accordance with the conditions will not cause environmental pollution.

# 14. Charges

The RD requires that the applicant pay an annual contribution of €9,767 towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2011.

# **15. Recommendation**

In preparing this report and the Recommended Determination I have consulted with Agency sectoral advisor Mr Brian Meaney, Senior Inspector.

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed:

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Caroline Connell Inspector Office of Climate, Licensing & Resource Use

#### **Procedural Note**

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996-2011.







**APPENDIX 2** 

Figure 6: Site plan

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**APPENDIX 3** 

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