This Memo has been cleared by Tom McLoughlin for submission to the Board

Signed: Bea Dated 6 Feb. 14



LICENSING & RESOURCE USE

REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO LICENCE CONDITIONS,

01

To: Directors

From: Technical Committee – Environmental Licensing Programme

Date: 6 FEBRUARY 2014

Objection to a Proposed Decision (PD) issued to Bord na Mona plc, Main Street, Newbridge, County Kildare, Licence Register No. W0275-01.

Application Details	
Type of facility:	Materials Recycling and Waste Transfer Facility for non-hazardous and hazardous waste.
Classes of Activity	3rd Schedule: D13, D14, D15
(P = principal activity):	4th Schedule: R3(P), R4, R5, R12, R13
Quantity of waste managed per annum (application):	99,000 tonnes
Classes of Waste:	Municipal solid waste, commercial & industrial waste, construction & demolition waste, and household hazardous waste.
Location of facility:	Drumman, in the townland of Derrygreenagh, County Offaly
Licence application received:	9 March 2010
PD issued:	19 November 2013

1. Company and Background to this report

This application relates to a proposal from Bord na Mona plc to construct a materials recycling and waste transfer station. The facility has planning permission (planning ref. No. 10/93) and proposes (1) to recover dry recyclables (incl. separation, sorting and baling), (2) to recover C&D waste, C&I waste and organic waste (incl. bulking), and (3) temporary storage of waste prior to transfer. The site of the proposed development is at the site of a cut-away bog located on part

of the Derrygreenagh Group of bogs operating under IPPC licence Reg. No. P0501-01.

This report relates to a valid first party objection received by the Agency in relation to the Proposed Decision (PD) issued to Bord na Mona plc on 19 November 2013.

2. Consideration of the objection.

The issues raised in the objection are summarised under the headings below. The original objection should be referred to at all times for greater detail and expansion of particular points.

Objector's Name	Date Received	
Bord na Mona plc	16 December 2013	

The Technical Committee (TC), comprising of John McEntagart (chair) and Brian Meaney, has considered all of the issues raised in the objection and this report details the Committee's comments. Each issue raised in the objection is outlined in turn below.

Objection 1. Introduction

The applicant notes a typographical error in the Introduction. In particular the applicant states the word "of" should be changed to "or" in the sentence, "Accepted waste will be temporarily stored, processed as might be required and transported off-site for further recovery of disposal".

Technical Committee's Evaluation

There is a typographical error as identified.

Recommendation:

Replace the word "of" with "or" in the sentence identified by the applicant as follows (amendment in bold):

"Accepted waste will be temporarily stored, processed as might be required and transported off-site for further recovery **or** disposal" included in the Introduction.

Objection 2. Part 1 Schedule of Activities Licenced

The applicant notes a typographical error in the description of Class D14. In particular the applicant states the word "and" should be changed to "to" in the sentence, "Class D14 Repackaging prior to submission to any of the operations numbered D1 and D13".

Technical Committee's Evaluation

There is a typographical error as identified.

Recommendation:

Amend the text of Class D14 in *Part I Schedule of Activities Licensed* as follows (amendment in bold):

"Class D14 Repackaging prior to submission to any of the operations numbered D1 **to** D13".

Objection 3. Condition 1.5.3 Restriction of operations on Sundays and public holidays.

Condition 1.5.3 states: No waste shall be accepted nor site operations carried out on Sundays and public holidays unless otherwise agreed by the Agency.

The applicant objects to the restrictions on waste acceptance and site operations being extended to public holidays. They state the operational availability of the facility has direct impact on the waste collections carried out in the wider vicinity of the facility. As such they assert the restriction has the potential to impact waste collection during the Christmas period. For example, when either Christmas Day or St Stephen's Day fall on Saturday, Sunday or Monday there would be three consecutive days that the facility would be unable to accept waste for processing and/or transfer to other facilities which may not be similarly restricted.

The applicant considers that, due to the rural location of the facility and the lack of nearby sensitive receptors, the public amenity would not be negatively impacted were the facility to be operational on public holidays.

Technical Committee's Evaluation

Condition 1.5.3 is a standard condition to prevent nuisance or undue disturbance to the public on Sundays and public holidays. Based on the Agency's GIS, the nearest sensitive receptor is more than a kilometre away, so the facility is not at a high risk of causing nuisance through site operations. However lifting the restriction on waste acceptance could result in increased facility-related traffic on the roads which may cause a disturbance to people living in the vicinity of the facility.

Nevertheless, the restriction can be lifted with the agreement of the Agency on a case by case basis and the TC considers it appropriate to leave any such lifting of restrictions to the OEE which will have more information regarding the potential of the facility to cause nuisance or undue disturbance at the time.

Recommendation:

No change.

Objection 4. Condition 3.2.1 Facility Notice Board

Condition 3.2.1 states:

The licensee shall, within one month of the date of grant of this licence, provide a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.

The applicant asserts that it would be misleading to the public to erect the notice board prior to the commencement of waste acceptance at the facility, especially given the uncertain timelines for detailed design, contractor procurement and construction of the facility.

Technical Committee's Evaluation

While it may not be misleading to the public to erect the notice board one month from the date of grant of licence, the TC considers it more appropriate to simply ensure the notice board is erected prior to waste acceptance.

Recommendation:

Amend Condition 3.2.1 to read:

The licensee shall, prior to commencement of waste acceptance at the facility, provide a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.

Objection 5. Condition 3.3 Data logging equipment

Condition 3.3 states:

The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

The applicant states that it may not be possible to fully comply with the condition as currently worded, as it may not be practical and/or technically feasible to install such equipment as may be required by the Agency. The applicant requests the condition be re-worded from "as may be required by the Agency" to "as may be agreed with the Agency".

Technical Committee's Evaluation

The Agency will take into account the practicalities and technical feasibilities of installing equipment prior to requiring it. Accordingly, the TC does not recommend an amendment of the condition.

Recommendation:

No change.

Objection 6. <u>Condition 3.4 Retention of samples of aqueous emissions</u>

Condition 3.4 states:

In the case of composite sampling of aqueous emissions from the operation of the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.

The applicant states that it would not be practicable to retain and refrigerate water samples on site indefinitely. They request a time line "for a minimum period of 2 months" be included in the condition.

Technical Committee's Evaluation

The applicant's request is reasonable. Mr Peter Webster of the Office of Environmental Assessment advised that a sample is of no analytical use to the Agency after a maximum period of 48 hours.

Recommendation:

Amend condition 3.4 as follows (amendment in bold):

In the case of composite sampling of aqueous emissions from the operation of

the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be retained **for a period of 48 hours** for EPA use.

Objection 7. Condition 3.7.1 Use of term "Decommissioning Management Plan"

Condition 3.7.1 states:

Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.

The applicant requests that this condition refer to "Decommissioning Management Plan" in order to be consistent with Condition 10.2.

Technical Committee's Evaluation

The TC considers it appropriate to use the term "Decommissioning Management Plan" used in Condition 10.2, because it is more appropriate for a materials recovery facility/waste transfer station than a restoration and aftercare management plan (more typically associated with a landfill or contaminated land), and to be consistent with Condition 10.

Recommendation:

Amend Condition 3.7.1 to read (amendment in bold):

Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground. Subject to the implementation of the **Decommissioning Management Plan** and to the agreement of the Agency, the requirement for such site security may be removed.

Objection 8. Condition 3.7.2 Retention of CCTV recordings

Condition 3.7.2 states:

The licensee shall install a CCTV system which records all truck movement into and out of the facility. The CCTV system shall be operated at all times and copies of recording kept on site and made available to the Agency on request.

The applicant objects to the apparent indefinite retention of CCTV recordings as impractical. The applicant requests the condition be re-worded, so that a definitive retention period is agreed.

Technical Committee's Evaluation

The TC considers it reasonable to amend the wording to enable clarity with respect to the timeframe for retention of CCTV recordings, although it is not possible to provide a definitive timeframe because an investigation might commence at any time that requires older records (perhaps years old). While the cost of storing digital files is unknown to the TC, it is unlikely to be large and is facilitated in the recommended re-wording of the condition.

In regard to the above, the TC recommends rewording the condition to enable the licensee to seek the OEE's approval to destroy older records. In this way the OEE can assess the request in the light of timely knowledge of the activities at the facility.

Recommendation:

Amend Condition 3.7.2 to read (amendment in bold):

The licensee shall install **and maintain** a CCTV system which records all truck movement into and out of the facility. The CCTV system shall be operated at all times. **Unless otherwise agreed by the Agency**, copies of recordings **shall be** kept on site **or stored electronically at a secure off-site location and** made available to the Agency on request.

Objection 9. Condition 3.8.2 Concreting the facility

Condition 3.8.2 states:

The licensee shall provide and maintain an impermeable concrete surface in all areas of the facility. The surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency. The licensee shall remedy any defect in concrete surfaces within five working days.

The applicant states it does not intend to concrete all areas of the site. A number of areas of the facility are to be landscaped or consist of impermeable paving (e.g., car parking), which the applicant considers more appropriate for surface water attenuation and visual screening/softening measures. The applicant requests the term "in all areas of the facility" being changed to "in all areas of the facility used for the handling and storage of waste and emissions".

Technical Committee's Evaluation

The TC considers it appropriate to have impermeable concrete surfacing only where waste activities take place and recommends Condition 3.8.2 be amended accordingly.

Recommendation:

Amend Condition 3.8.2 to read (amendment in bold):

The licensee shall provide and maintain an impermeable concrete surface in all areas of the facility **where waste is stored or processed**. The surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency. The licensee shall remedy any defect in concrete surfaces within five working days.

Objection 10. Condition 3.10 Waste Transfer Area and C&D waste recovery

Condition 3.10 states:

Construction and Demolition Waste Recovery Area

- 3.10.1 The licensee shall provide and maintain a construction and demolition waste recovery area. This infrastructure shall at a minimum comprise the following:
- (i) an impermeable concrete slab;
- (ii) collection and disposal infrastructure for all run-off;
- (iii) appropriate bunding to provide visual and noise screening;
- 3.10.2 All stockpiles shall be adequately contained to minimise dust generation.

3.10.3 The licensee shall implement measures to minimise dust generation at this facility and shall as instructed by the Agency install a sprinkling irrigation system for the control of dust nuisance from the facility. Any remedial works necessary to control dust must be implemented within a time-scale to be agreed by the Agency.

3.10.4 Only construction and demolition waste shall be accepted at this area. Wastes that are capable of being recovered shall be separated and shall be stored temporarily in this area in advance of being subjected to other recovery activities at the facility or transport off the facility.

The applicant considers that the above condition is not consistent with the proposed layout of the facility. The applicant states that C&D waste will be accepted (along with residual "black bag" waste) within the waste transfer area of the facility Waste Reception & Processing Building. The applicant considers it more appropriate to refer to the Waste Transfer Area as a whole, rather than specify the C&D waste section.

As C&D waste will be accepted within a fully enclosed area, the applicant considers the requirements of Conditions 3.10.1 and 3.10.2 will be met and are unnecessary. Instead, the applicant considers a condition requiring a fully enclosed waste transfer area should be stipulated.

In respect of Condition 3.10.3 regarding measures to mitigate dust, the applicant considers the requirement for a sprinkler system is excessive, given:

- The building is fully enclosed;
- The operation of dust extraction within the building;
- The implementation of dust management measures required by Conditions 3.25, 4.6 and 6.18;
- The water minimisation measures required by Condition 7.3.

As the applicant requests the condition refer to the waste transfer area, it proposes removing the text "Only construction and demolition waste shall be accepted at this area" from Condition 3.10.4.

Technical Committee's Evaluation

The TC considers it acceptable to refer to the Waste Transfer Area instead of the Construction and Demolition Waste Recovery area. A fully enclosed building will mitigate the risks reflected in Conditions 3.10.1 and 3.10.2. In addition there is no need to specify a sprinkler system in Condition 3.10.3. Further remedial measures for dust mitigation can be agreed with the Agency. The TC proposes to delete Condition 3.10.4.

Recommendation:

Amend Condition 3.10 to read (amendment in bold):

3.10 Waste Transfer Area

- 3.10.1 The licensee shall provide and maintain a fully enclosed waste transfer area for the acceptance of wastes included in Schedule A2 of this licence and identified in Drawing Number LW09-660-04-100-004.
- 3.10.2 The licensee shall implement measures to minimise dust generation at the waste transfer area. Any further remedial works necessary to

control dust **shall be as agreed by the Agency** and must be implemented within a time-scale to be agreed by the Agency.

Objection 11. Condition 3.12(iii) Biowaste Storage Area

Condition 3.12 states:

Biowaste Storage Area

The biowaste storage area shall at a minimum comprise the following:

- (i) Indoor waste acceptance, inspection and storage areas;
- (ii) An indoor waste quarantine area;
- (iii) Air handling and odour abatement equipment including bio-filter volume/capacity and odour abatement equipment provided on the basis of 100% standby capacity; and
- (iv) Leachate management infrastructure.

The applicant considers the provision of air handling and odour abatement equipment on the basis of 100% standby capacity to be impracticable and unnecessary. They state the extent of the additional infrastructure associated with the provision of 100% standby capacity could potentially render the project commercially unviable and request that Condition 3.12(iii) be deleted.

The applicant identifies the equipment it considers relevant as: negative air extraction within all areas of the Waste Reception & Processing Building, where air from the waste transfer area and recyclables processing area is directed to a dust filtration system and air from the biowaste storage area is directed to biofiltration.

The applicant recognises the use of dust extraction and biofiltration as BAT, but does not consider the provision of 100% standby capacity as BAT.

The applicant states the dust and odour abatement equipment will be treating ambient air from within the Waste Reception & Processing Building, but not process air from a composting system. Accordingly the applicant asserts that the potential impacts on the environment would be temporary in nature and negligible in effect, given the remote location of the facility with respect to potential sensitive receptors and the nature of the air streams being treated. The applicant states that emergency call outs will provide sufficient back up and support to the operation of these systems.

Technical Committee's Evaluation

The TC notes that the odour abatement equipment is handling room air as opposed to process air. In addition, the air handling and odour abatement equipment is treating air from a relatively small part of a much larger building. In addition, the licence requires waste to be moved off-site within 48 hours (72 hours for public holiday weekends).

In regard to the above, the odour risk from the site is significantly reduced, and there is not a great benefit in requiring 100% standby capacity. Accordingly, the TC recommends deleting this condition.

Recommendation:

Delete Condition 3.12(iii) and renumber Conditions 3.12(iv) and 3.12(v).

Objection 12. Condition 3.16 Timeframe for of silt traps and oil separators

Condition 3.16 states:

Silt Traps and Oil Separators

The licensee shall, within six months of date of grant of this licence, install and maintain silt traps and oil separators at the facility:

- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the facility pass through a silt trap in advance of discharge;
- (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.

The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).

The applicant considers it inappropriate to require the above works be completed within six months of data of grant of licence, when there is uncertainty regarding the timeframes for the detailed design, contractor procurement and construction of the facility. The applicant requests that the timeframe be changed to prior to commencement of waste acceptance of the facility.

Technical Committee's Evaluation

The TC considers it more appropriate to simply ensure the works are carried out prior to waste acceptance.

Recommendation:

Amend Condition 3.16 to read (amendment in bold):

3.16 Silt Traps and Oil Separators

The licensee shall, prior to the commencement of waste acceptance at the facility, install and maintain silt traps and oil separators at the facility:

- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the facility pass through a silt trap in advance of discharge;
- (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.

The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).

Objection 13. Condition 3.18 Timeframe for works

Condition 3.18 states:

All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) within six months from the date of grant of this licence.

The applicant makes the same objection as made in objection 12 above regarding the timeframe ("within six months from the date of grant of this licence") for the works required by Condition 3.18.

Technical Committee's Evaluation

The TC considers it more appropriate to simply ensure the works are carried out prior to waste acceptance.

Recommendation:

Amend Condition 3.18 to read (amendment in bold):

3.18 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) prior to the acceptance of waste at the facility.

Objection 14. Condition 3.21 Timeframe for works

Condition 3.21 states:

The licensee shall, within three months of the date of grant of this licence, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

The applicant makes the same objection as made in objection 12 above regarding the timeframe ("within three months from the date of grant of this licence") for the works required by Condition 3.21.

Technical Committee's Evaluation

The TC considers it more appropriate to simply ensure the works are carried out prior to waste acceptance.

Recommendation:

Amend Condition 3.21 to read (amendment in bold):

3.21 The licensee shall, prior to the commencement of waste acceptance at the facility, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

Objection 15. <u>Condition 3.23 Wheel Cleaners</u>

Condition 3.23 states:

Weighbridge and Wheel Cleaners

- 3.23.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
- 3.23.2 The wheel cleaners shall be used by all vehicles leaving the facility as required to ensure that no trade effluent/storm water or waste is carried off-site. All water from the wheel cleaning area shall be directed to the trade effluent drainage network.

3.23.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheelwash and disposed of appropriately.

The applicant states that it had not proposed a wheelwash because they did not consider it typical for dry materials recycling facilities and/or waste transfer facilities. In addition, the applicant does not consider it necessary for their facility, given the nature of materials to be accepted.

The applicant also states that the addition of wastewater from a wheelwash unit may require reconsideration of the WWTP sizing in order to achieve the emission limit values stipulated in Schedule B.2.

The applicant requests amending Condition 3.23 such that the need for a wheelwash would be reviewed on an annual basis.

Technical Committee's Evaluation

Condition 3.23 is a standard condition for all materials recovery facilities/waste transfer stations and the TC considers it necessary to ensure waste material/leachate from the facility is not brought off site. While much of the material arriving at the facility is dry, the applicant is also proposing to accept biowaste and 'black bag residual' waste. In addition, green bin waste can become contaminated. It is noted that the condition requires the use of the wheel cleaners "as required".

Recommendation:

No change.

Objection 16. Condition 3.26.1 Firewater risk assessment timeframe

Condition 3.26.1 states:

The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment within six months of the date of grant of this licence.

The applicant makes the same objection as made in previous objections regarding the timeframe ("within six months from the date of grant of this licence") for the works required by Condition 3.26.1.

Technical Committee's Evaluation

The TC considers it more appropriate to simply ensure the works are carried out prior to waste acceptance.

Recommendation:

Amend Condition 3.26.1 to read (amendment in bold).

The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment six months prior to the commencement of waste acceptance at the facility.

Objection 17. Condition 3.26.3 Firewater retention

Condition 3.26.3 states:

In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the containment pond. The licensee shall examine, as part of the response programme in Condition 3.26.2 above, the provision of automatic diversion of storm water to the containment pond. The licenses shall have regard to any guidelines issued by the Agency with regard to firewater retention.

The applicant notes that storm water will pass through the storm water attenuation pond. In the event of a fire or spillage the attenuation pond will act as a containment pond, with automatic closing of valves controlling the discharge in the event of an emergency or detection of relevant trigger values.

The applicant requests that the term containment pond be replaced with stormwater attenuation pond in Condition 3.26.3.

Technical Committee's Evaluation

The TC considers it reasonable to replace the term containment pond with the term stormwater attenuation pond as this more accurately reflects the proposed site. It may be however that the risk assessment required under condition 3.26.1 will indicate deficiencies in any proposal to use the stormwater attenuation pond, in which case it is appropriate to allow for alternative solutions should the need arise.

Recommendation:

Amend Condition 3.26.3 to read (amendment in bold).

In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the **stormwater attenuation pond or alternative as may be identified in the risk assessment required under condition 3.26.1**. The licensee shall examine, as part of the response programme in Condition 3.26.2 above, the provision of automatic diversion of storm water to the **stormwater attenuation pond or alternative**. The licenses shall have regard to any guidelines issued by the Agency with regard to firewater retention.

Objection 18. Condition 6.6 Groundwater monitoring equipment

Condition 6.6 states:

The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.

The applicant accepts that equipment should be fit for purpose but considers requiring it to be to Agency specifications to be prohibitively onerous. The applicant considers "fit for purpose" to be sufficient.

Technical Committee's Evaluation

The TC considers that the licensee can agree the specification of the equipment with the Agency.

Recommendation:

Amend Condition 6.6 to read as follows:

The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times.

The sampling equipment shall be **agreed by the Agency**.

Objection 19. Condition 6.13 & Schedule C.5 Noise monitoring

Condition 6.13 and Schedule C.5 state:

6.13 Noise

The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.

C.5 Noise Monitoring

Location	Measurement	Frequency
N1, N2 (as per Drawing Number LW09-660-04- 300-005 Rev B or as may	Daytime dB L _{Ar, T} (30 minutes)	Quarterly
be otherwise agreed/directed under Condition 6.8)	Evening dB L _{Ar, T} (30 minutes)	
	Night-time dB L _{Aeq, T} (15 – 30 minutes)	
Period	Minimum Su	rvey Duration
Daytime	4 hour survey with a minimum of Mote 2 monitoring location.	f 3 sampling periods at each noise
Evening-time	2 hours survey with a minimum of monitoring location.	of I sampling period at each noise
Night-time Note 1	3 hour survey with a minimum of monitoring location.	f 2 sampling periods at each noise

Note 1: Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.

Note 2: Sampling period is to be the time period T stated within the relevant licence. Typically this will be either 15 minutes or 30 minutes in duration. This applies to day, evening and night time periods.

The applicant identifies an inconsistency in the frequency of monitoring required by Condition 6.13 (annual) and Schedule C.5 (quarterly). The applicant considers that annual frequency is sufficient given the noise impact assessment in the licence application identified no noise impact at noise sensitive locations.

In addition, the applicant considers the information in relation to 'Period' and 'Minimum Survey Duration' in Schedule C.5 has been superseded by the Table 5 provided in the Agency's response to Question 3 in its FAQs on the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)'.

Technical Committee's Evaluation

The TC considers annual noise monitoring is appropriate given the noise impact assessment did not indicate a significant risk of noise nuisance and the distance of noise sensitive receptors (greater than 1 km). As identified by the applicant, Table 5 in the Agency's response to Question 3 in its FAQs on NG4 has superseded the information included in Schedule C.5. It is proposed to use the new table 5 from

the FAQ to amend Schedule C.6. It is also proposed to amend the note referring to the sampling periods.

Recommendation:

Amend Condition 6.13 to read:

6.13 Noise

The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency, or as otherwise agreed by the Agency.

Amend Schedule C.5 to read:

C.5 Noise Monitoring

Location	Measurement	Fréquency
N1, N2 (as per Drawing Number LW09-660-04- 300-005 Rev B or as may	Daytime dB L _{Ar, T} (30 minutes)	Annually
be otherwise agreed/directed under Condition 6.8)	Evening dB L _{Ar, T} (30 minutes)	
	Night-time dB L _{Aeq, T} (15 – 30 minutes)	
Period	Minimum Survey Duration	
Daytime (07:00 to 19:00hrs)	A minimum of 3 sampling monitoring location.	periods Note 2 at each noise
Evening-time (19:00 to 23:00hrs)	A minimum of 1 sampli monitoring location.	ng period at each noise
Night-time Note 1 (23:00 to 07:00hrs)	monitoring location.	ng periods at each noise

Note 1: Night-time measurements should be made between 23:00hrs and 04:00hrs, Sunday to Thursday, with 23:00hrs being the preferred start time.

Note 2: Sampling periods shall be as follows: Daytime dB LAr, T (30 minutes), Evening dB $L_{Ar, T}$ (30 minutes) and Night-time dB $L_{Aeq, T}$ (15 – 30 minutes)

Objections 20 and 21. Conditions 6.14.1 and 6.14.2 Stormwater monitoring

Condition 6.14 states:

Storm Water

- 6.14.1 A visual examination of storm water discharges shall be carried out daily. A log of such inspections shall be maintained.
- 6.14.2 Unless otherwise agreed by the Agency, the trigger levels for storm water discharge to surface water at SW2 are:
 - (i) Suspended Solids 25 mg/l
 - (ii) BOD 2.6 mg/l
 - (iii) Total Ammonia (as N) 0.14 mg/l.

The applicant considers that weekly (as opposed to daily) visual inspection of storm water is more appropriate as there may be no discharge on days of little or no rainfall.

The applicant notes that the reference to SW2 in Condition 6.14.2 is incorrect – it should be SWD2 (see objection 33). The applicant considers that the trigger levels for storm water relate to effluent from the WWTP. Effluent from the WWTP passes through SW1 and is controlled through emission limit values stipulated in Schedule B.2. In this way the applicant requests that the suspended solids trigger level of 25 mg/l be increased to 35 mg/l, the standard for sewage effluent in the Urban Waste Water Treatment Regulations. They state it cannot be guaranteed that the WWTP will consistently achieve 25 mg/l, although it is the design value of the WWTP. They state that a value greater than 25 mg/l would not necessarily require remedial action. The applicant also states that a discharge of stormwater with ammonia levels above the trigger level would not have a significant impact due to the natural ammonia levels associated with the surrounding peatlands.

Technical Committee's Evaluation

The TC considers daily visual inspection of storm water discharges to be appropriate for such a facility. On days where there is no discharge, this fact may simply be recorded.

SWD2 relates to storm water run-off and does not include effluent from the WWTP. The trigger levels are not emission limit values, nor do they indicate levels at which environmental pollution will occur. They are levels at which an investigation into the potential for storm water on site to be contaminated and cause pollution should be carried out. The TC considers the trigger levels in the PD to be appropriate for a waste facility of this type. While it may be challenging to meet the trigger levels, they should be achievable as waste activities take place indoors. In addition, the condition, as written, allows for variation in the trigger levels should the Agency agree it is appropriate.

The TC recommends amending Condition 6.14.2, so that it has the correct reference.

Recommendation:

Amend Condition 6.14.2 to read as follows (amendment in bold):

- 6.14.2 Unless otherwise agreed by the Agency, the trigger levels for storm water discharge to surface water at **SWD2** are:
 - (i) Suspended Solids 25 mg/l
 - (ii) BOD 2.6 mg/l
 - (iii) Total Ammonia (as N) 0.14 mg/l.

Objection 22. Conditions 6.16 Timeframe for data management system

Condition 6.16 states:

The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.

As with previous objections, the applicant requests the timeframe in this condition is changed to 'prior to commencement of waste acceptance at the facility', due to

the uncertainties regarding the timeframe for detailed design, contractor procurement and construction.

Technical Committee's Evaluation

The TC considers it appropriate to simply ensure the requirements of the condition are in place prior to waste acceptance.

Recommendation:

Amend Condition 6.16 to read (amendment in bold):

The licensee shall, **prior to the acceptance of waste at the facility**, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.

Objection 23. Condition 6.18 Odour Control

Condition 6.18.1 states:

6.18 Dust/Odour Control

6.18.1 All putrescible and other odour-forming waste stored overnight at the facility shall be stored in suitably covered and enclosed containers, and shall be removed from the facility within 48 hours of its arrival or generation on site, except, in the case of waste to be removed from the facility, at Public Holiday weekends. At Public Holiday weekends, such waste shall be removed within 72 hours of its arrival or generation on site.

The applicant objects to Condition 6.18.1, where it requires putrescible and other odour-forming waste stored overnight to be stored in 'suitably covered and enclosed containers'. Instead, the applicant requests the condition stipulate storage in 'fully enclosed buildings'.

The applicant states that the waste in question consists of separately collected biowaste and 'black bag' residual waste, where the applicant considers biowaste to have the greater potential for odour generation. The applicant notes that separately collected biowaste will be stored in a separate and fully enclosed part of the building with negative air extraction prior to odour abatement, which the applicant considers will prevent any potential negative impacts related to odour.

The applicant also states 'black bag' waste will be stored within the fully enclosed transfer area of the facility, which the applicant considers will minimise potential odour related impacts from this material.

The applicant considers that the storage of putrescible and other odour forming waste in suitable covered and enclosed containers is impractical and that a fully enclosed building provides an equivalent and, in the case of the biowaste storage system, a superior means of odour control than covered and/or enclosed containers.

Technical Committee's Evaluation

While the odour potential of biowaste may be more significant than 'black bag' residual waste, the odour potential of the latter is still significant. The storage of 'black bag' waste is not under negative pressure, so there is a potential for the release of odour emissions. However, the use of covered and enclosed containers relates more to the storage of waste outdoors.

The TC considers the storage of biowaste in a fully enclosed building under negative air pressure, with air extracted to odour abatement to be suitable. However the same may be required for the storage of 'black bag' residual waste. Condition 3.25(ii) requires, unless otherwise agreed with the Agency, all buildings or areas processing or storing putrescible waste to be maintained at negative air pressure with ventilated gases being subject to treatment. Accordingly, the licensee will have to store 'black bag' residual waste under negative air pressure with air directed to odour abatement, unless the Agency agrees otherwise. Given the presence of Condition 3.25(ii), the TC accedes to the request to amend Condition 6.18.1.

Recommendation:

Amend Condition 6.18.1 to read (amendment in bold):

All putrescible and other odour-forming waste stored overnight at the facility shall be stored in **fully enclosed buildings**, and shall be removed from the facility within 48 hours of its arrival or generation on site, except, in the case of waste to be removed from the facility, at Public Holiday weekends. At Public Holiday weekends, such waste shall be removed within 72 hours of its arrival or generation on site.

Objection 24. Conditions 6.19.2 Wash down of floor

Condition 6.19.2 states:

The floor of the waste reception and processing building shall be cleaned on a weekly basis and on a daily basis where putrescible waste is handled. The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied, or as a minimum on a weekly basis.

The applicant considers it impracticable to wash down the recovered waste storage bays on a weekly basis for a number of reasons. Firstly, the nature of the recovered material is dry (paper, plastic, card, metals, etc.) and the applicant considers the dry recyclables waste stream will not generate any waste requiring washing down.

Secondly, the frequency of emptying of each of these bays will be based on the logistics of material movement off site, which will be influenced by market conditions. In the event that material is stored for greater than a week, the applicant states, the condition would require unnecessary movement of material to facilitate washing (increasing fuel and water consumption).

The applicant requests the requirement to clean weekly be amended to cleaning on each occasion the bays are empty.

Technical Committee's Evaluation

The dry recyclable waste stream may contain contaminants, and there may be material that requires washing down. In addition, the requirement to clean the floor of the storage bays on a weekly basis is a standard condition that has not proved impracticable at other facilities. In addition, waiting for a storage bay to be empty may lead to an undue delay in cleaning. Nevertheless, based on the level of contamination of the waste stream, it may be acceptable to reduce the frequency of washing and this is reflected in the wording of the condition recommended by the TC.

Recommendation:

Amend Condition 6.19.2 to read (amendment in bold):

The floor of the waste reception and processing building shall be cleaned on a weekly basis and on a daily basis where putrescible waste is handled. The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied, or as a minimum on a weekly basis or such other frequency as may be agreed by the Agency.

Objection 25. Conditions 6.19.3 Washing waste handling/processing plant

Condition 6.19.3 states:

All waste handling/processing plant shall be cleared of all waste and washed down on a weekly basis.

The applicant states the conditions does not reflect operational practices in transfer stations and dry material recycling facilities. In particular, they consider the introduction of water into the dry materials processing plant may have negative impact on the quality of recovered recyclable materials and is not necessary given the dry nature of the wastes being processed. The applicant requests the condition be reworded to simply require plant be cleared of all waste at an appropriate frequency.

Technical Committee's Evaluation

The condition does not just relate to processing dry recyclables, which may be contaminated, but to 'black bag' residual waste and biowaste. The TC considers it best practice to wash down processing equipment. However, the TC acknowledges that water contamination could have a negative impact on the quality of recovered materials. Accordingly the TC recommends amending the condition so that only that plant and those areas of the facility handling wet or putrescible waste is to be washed down.

Recommendation:

Amend Condition 6.19.3 to read (amendment in bold):

All waste handling/processing plant shall be cleared of all waste and, in the case of plant used for wet or putrescible waste, washed down on a weekly basis.

Objection 26. <u>Conditions 7.1 Timeframe for energy audit</u>

Condition 7.1 states:

The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.

Given the uncertain timeframes for this development, the applicant requests it be changed to within one year of commencement of waste acceptance at the facility.

Technical Committee's Evaluation

The TC acknowledges that it is more appropriate to carry out the energy audit when the facility is built and has been operating for a period of time.

Recommendation:

Amend Condition 7.1 to read (amendment in bold):

The licensee shall carry out an audit of the energy efficiency of the site within one year of **the commencement of waste acceptance at the facility**. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.

Objection 27. Condition 10 Closure, Restoration and Aftercare Management

The applicant considers reference to the terms restoration and aftercare in the title of Condition 10 is not applicable to their facility, which should not require significant restoration and long term aftercare requirements. The applicant requests that the condition be entitled, 'Decommissioning and Residuals Management'.

Technical Committee's Evaluation

Conditions 10.1 to 10.4 make reference to a decommissioning management plan, rather than a closure, restoration and aftercare management plan, which would be appropriate for this type of facility. Accordingly, the TC considers it reasonable to re-title the 'Decommissioning and Residuals Management'.

Recommendation:

Amend the title of Condition 10 to read (amendment in bold):

Condition 10. Decommissioning and Residuals Management

Objection 28. Conditions 11.6(xiii) Typographical error

Condition 11.6 states:

11.6 The licensee shall as a minimum ensure that the following documents are accessible at the site:

(xiii) the name and qualifications of all persons who carry our all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring; and ...

The applicant notes that Condition 11.6(xiii) contains a typographical error, where 'carry our' should read 'carry out'.

Technical Committee's Evaluation

The TC recognises the typographical error and recommends correcting it accordingly.

Recommendation:

Amend Condition 11.6 (xiii) to read (amendment in bold):

the name and qualifications of all persons who carry **out** all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring; and

Objection 29. Conditions 12.1.1 Financial charges timeframe

Condition 12.1.1 states:

The licensee shall pay to the Agency an annual contribution of €9,750, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Act 1996 as amended. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Act 1996 as amended, and all such payments shall be made within one month of the date upon which demanded by the Agency.

The applicant objects to the requirement to pay the Agency charges within one month of the date of grant of the licence. The applicant requests that the condition be reworded so that payment is made within one month from the date of commencement of enforcement.

Technical Committee's Evaluation

The TC considers no enforcement charges are due until after the date of commencement of enforcement. In this regard the TC considers it reasonable to reword the condition so that payment is made within one month from the date of commencement of enforcement.

Recommendation:

Amend Condition 12.2.1 to read:

The licensee shall pay to the Agency an annual contribution of €9,750, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Act 1996 as amended. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31st day of December, and shall be paid to the Agency within one month from **that** date. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Act 1996 as amended, and all such payments shall be made within one month of the date upon which demanded by the Agency.

Objection 30. Conditions 12.2.3 Financial provision terminology

Condition 12.2.3 states:

The licensee shall, prior to commencement of waste acceptance at the facility and to the satisfaction of the Agency, make financial provision to cover any liabilities associated with the operation (including closure, restoration and aftercare).

As per Condition 10, the applicant requests the reference to restoration and aftercare be changed to decommissioning.

Technical Committee's Evaluation

The TC considers it reasonable to keep the language between Condition 10 and Condition 12.2.3 consistent.

Recommendation:

Amend Condition 12.2.3 to read:

The licensee shall, prior to commencement of waste acceptance at the facility and to the satisfaction of the Agency, make financial provision to cover any liabilities associated with the operation (including closure, **decommissioning** and residuals management).

Objection 31. Conditions 12.2.5 Financial provision terminology

Condition 12.2.5 states:

The licensee shall revise the cost of closure, restoration and aftercare annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.4.

As per Conditions 10 and 12.2.3 above, the applicant requests the reference to restoration and aftercare be changed to decommissioning.

Technical Committee's Evaluation

The TC considers it reasonable to keep the language between Conditions 10, 12.2.3 and Condition 12.2.5 consistent.

Recommendation:

Amend Condition 12.2.5 to read (amendment in bold):

The licensee shall revise the cost of closure, **decommissioning and residuals management** annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.4:

Objection 32. Schedule B.1.2 Emission limit value for A2

Schedule B.1.2 states:

Emission Point Reference No:

B.1.2 Emissions from Dust Extraction Unit

Location:	To be agreed by the Agency
Parameter	Emission Limit Value
Dust	30 mg/m ³

A2

The applicant objects to the inclusion of an emission limit value for A2. The applicant notes that the use of dust extraction is considered BAT in itself, by reference to the Agency's *Final Draft BAT Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery.* The applicant states this guidance note does not contain any specific emission limit value in terms of dust emissions from dust extraction systems, nor does the supporting *Bref for Waste Treatment Industries*.

The applicant states it is unclear as to the origin of the proposed emission limit value (ELV) and states that it is unaware of any such similar ELV in a licence for any other waste transfer or materials recycling facility. The applicant contends that the ELV is unnecessary and unwarranted.

The applicant considers that any impact resulting from dust emissions will be identified through dust deposition monitoring and that this is sufficient.

Technical Committee's Evaluation

The TC considers accepts that the emission from A2 is not of significance to warrant an emission limit value and recommends the deletion of Schedule B.1.2.

Recommendation:

Delete Schedule B.1.2 and re-number Schedule B.1.

Objection 33. Schedule B.2 Emission Point Reference Numbers

Schedule B.2 states:

B.2 Emissions to Water

Emission Point Reference No: SW1 - outlet from waste water treatment plant

(as per Drawing Number LW09-660-04-200-

025 Rev A)

Name of Receiving Waters:

Mongagh River (WFD Code: IE EA 07 1025)

248934E 238848N

Volume to be emitted:

Location:

Maximum in any one day: 9 m³
Maximum in any one hour: 0.5 m³

Waximum in any one nour. 0.5 in	
Parameter	Emission Limit Value
Temperature	25°C (max.)
рН	6 - 9
	mg/l
BOD	20
COD	125
Suspended Solids	25
Ammonia (as N)	2
Orthophosphate (as P)	2

The applicant wishes to correct the references used for the emissions to water emission points and to the drawing referenced for the emission point reference no. The applicant submitted a revised drawing (Drawing Number LW09-660-04-300-005 Rev C) to provide clarify regarding the emission points.

The drawing identifies SWD1 (emission location – waste water treatment plant), SWD2 (emission location – storm water discharge), SW1 (downstream surface water monitoring location) and SW2 (upstream surface water monitoring location).

Accordingly, the applicant request amending Schedule B.2 to identify the emission point reference number as SWD1 and to reference Drawing Number LW09-660-04-300-005 Rev C).

Technical Committee's Evaluation

The TC recommends amending Schedule B.2 in line with the new information submitted by the applicant.

Recommendation:

Amend the heading of Schedule B.2 to read (amendment in bold):

B.2 Emissions to Water

Emission Point Reference No:

SWD1 - outlet from waste water treatment

plant (as per Drawing Number LW09-660-

04-300-005 Rev C)

Objection 34. Schedule C.1.1 Control parameter terminology

Schedule C.1.1 states:

C.1.1 Control of Emissions to Air

Emission Point Reference No:

Bio-filtration Unit: A1

Description of Treatment:

Bio-filtration

Control Parameter	Monitoring	Key Equipment Note 1
Air Management and Treatment		
Air extraction	Continuous with alarm/call-out	Pumps/ engines
		Pressure gauges
	Bio-filters	
Ammonia	Monthly (at inlet and outlet)	Colorimetric indicator tubes Note 2
Hydrogen sulphide	Monthly (at inlet and outlet)	Colorimetric indicator tubes Note 2
Mercaptans	Monthly (at inlet and outlet)	Colorimetric indicator tubes Note 2
Amines	Monthly (at inlet and outlet)	Colorimetric indicator tubes Note 2
	Bed Media ^{Note 3}	
Odour assessment	Daily	Subjective impression (
Condition and depth of bed media	Daily	Visual inspection
Moisture content	Monthly	Agreed method
рН	Bi-annually	Agreed method
Ammonia	Bi-annually	Agreed method
Total viable counts	Bi-annually	Agreed method
General		
Fan	Daily visual check	System is operational
Negative pressure across bio-filter	Monthly	Air current tubes

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

Note 2: Or an alternative method agreed by the Agency.

Note 3: The bio-filter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials or total replacement of bed materials shall be carried out as required subject to bed performance.

The applicant requests, in the interests of clarity, that the term 'negative pressure across biofilter' be replaced with 'differential pressure across biofilter'.

Technical Committee's Evaluation

The TC recommends Schedule C.1.1 be clarified in line with the applicant's comments. While negative pressure may be required, differential pressure is to be measured.

Recommendation:

Amend Schedule C.1.1 as follows:

In the first column of the table, delete the text "Negative pressure across bio-filter". Replace with "Differential pressure across bio-filter."

Objection 35. Schedule C.1.2 Emissions Monitoring

Schedule C.1.2 states:

C.1.2 Monitoring of Emissions to Air

Emission Point Reference No: Bio-filtration Unit: A1

Parameter	Monitoring Frequency	Analysis Method/Technique
Odour	Quarterly	See Note I
Ammonia	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Hydrogen sulphide	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Mercaptans	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Amines	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2

Note 1: Odour measurements shall be by olfactometric measurement and analysis shall be for mercaptans, hydrogen sulphide, ammonia, and amines.

Note 2: Or an alternative method agreed by the Agency.

The applicant considers it excessive to require quarterly olfactometric measurement and analysis where the air for treatment is coming from the biowaste reception building as opposed to process air from a composting process (which the applicant considers more odorous). They state bi-annual monitoring is required in Proposed Decision reg. no. W0283-01 where composting process air is being treated.

The applicant also considers it excessive to require monthly measurements of ammonia, hydrogen sulphide, mercaptans and amines due to what the applicant considers is the low odorous load to the biofiltration unit.

The applicant requests that the frequency of odour monitoring be reduced to biannual and the frequency of monitoring the other parameters be reduced to quarterly.

The applicant also considers that the monitoring frequencies should be reviewed after 12 months of operation and reduced to annual if there is no odour nuisance and odour emission concentrations from the bio-filtration unit are within specification. The applicant requests a note be included in the schedule to this effect.

Technical Committee's Evaluation

Proposed Decision reg. no. W0283-01 (Bord na Mona, Drehid mechanical-biological treatment facility) specifies bi-annual odour monitoring and monthly monitoring for ammonia, hydrogen sulphide, mercaptans and amines. Given that

the Bord na Mona, Drehid facility is treating composting process air and given that odour sensitive locations are more than 1 km away, it seems reasonable to the TC that the monitoring requirements are no greater than that required in the Proposed Decision for W0283-01.

In regard to the request to include a note to reduce the frequency of monitoring if the bio-filtration unit performs to specification, the TC considers this unnecessary because the frequency and scope of monitoring can be amended at any time in accordance with Condition 6.8. The TC considers it appropriate to maintain monthly monitoring of ammonia, hydrogen sulphide, mercaptans and amines until the licensee is in position to demonstrate, based on results, that a reduced frequency is appropriate.

Recommendation:

Amend Schedule C.1.2 to read:

C.1.2 Monitoring of Emissions to Air

Emission Point Reference No:

Bio-filtration Unit: A1

Pärameter	Monitoring Frequency	Analysis Method/Technique
Odour	Bi-annual	See Note 1
Ammonia	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Hydrogen sulphide	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Mercaptans	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Amines	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2

Note 1: Odour measurements shall be by olfactometric measurement and analysis shall be for mercaptans, hydrogen sulphide, ammonia, and amines.

Note 2: Or an alternative method agreed by the Agency.

Objection 36. Schedule C.2.1 Monitoring of Emissions to Water

Schedule C.2.1 states:

C.2.1 Monitoring of Emissions to Water

Emission Point Reference No:

SWI

Description of Treatment:

Secondary treatment of sanitary effluent and

foul water

Tour water		
Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow	Continuous Daily ^{Note 2}	On-line flow meter with recorder
Temperature	Continuous	On-line temperature probe with recorder
рН	Continuous	pH electrode/meter with recorder
Total Ammonia (as N)	Monthly	Standard Method
Chemical Oxygen Demand	Monthly	Standard Method
Suspended Solids	Monthly	Standard Method

Biochemical Oxygen Demand	Monthly	Standard Method
Orthophosphate (as P)	Monthly	Standard Method
Nitrate	Monthly	Standard Method
Phenols	Monthly	Standard Method
Oils, fats and greases	Monthly	Standard Method
Priority Substances Note 3	Annually	Standard Method
Toxicity Note 4	As may be required	To be agreed by the Agency

Note 1: The licensee shall install a composite sampler. All samples shall be collected on a 24 hour flow proportional composite sampling basis.

As per objection 33 regarding the identification of emission points, the applicant requests that the emission point reference no. be revised to SWD1 (as per Drawing Number LW09-660-04-300 Rev C).

The applicant would also like to introduce note 5 to the table to state, 'the monitoring frequency for each parameter can be reduced with the prior agreement of the Agency'. The applicant notes there is a similar note (note 2) in Schedule C.2.2.

Technical Committee's Evaluation

The TC recommends amending the emission point reference number in line with objection 33.

In regard to the request to include a note to reduce the frequency of monitoring, the TC considers this unnecessary because, the frequency and scope of monitoring can be amended at any time in accordance with Condition 6.8.

Recommendation:

Amend the heading of Schedule C.2.1 to read (amendment in bold):

C.2.1 Monitoring of Emissions to Water

Emission Point Reference No:

SWD1 (as per Drawing Number LW09-660-

04-300-005 Rev C)

Objection 37. Schedule C.2.2 Emission point reference number

Schedule C.2.2 states:

C.2.2 Monitoring of Storm Water discharge

Discharge Point Reference No:

SW2 - outlet from a pipe from surface water

attenuation pond (as per Drawing

Note 2: Total effluent discharged over the 24 hour period in which the composite sample is collected shall be recorded.

Note 3: The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to "Guidance on the Screening for Priority Substances for Waste Water Discharge Licences" issued by the Agency.

Note 4: The number of toxic units (Tu) = 100/x hour EC/LC₅₀ in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.

Parameter Note 1	Monitoring Frequency Note 2	Analysis Method/Technique
Visual Inspection	Daily	Sample and examine for colour and odour.
pН	Continuous	Standard method
COD	Quarterly	Standard method
BOD	Quarterly	Standard method
Total Ammonia	Quarterly	Standard method
Suspended Solids	Quarterly	Standard method
Sulphate	Quarterly	Standard method
Mineral Oils	Quarterly	Standard method
Dissolved metals	Annually	Standard method
Hazardous substances	Annually	Standard method

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

Note 2: Apart from the visual inspection, the monitoring frequency for each parameter can be reduced with the prior agreement of the Agency.

As per objections 33 and 36 regarding the identification of emission points, the applicant requests that the emission point reference no. be revised to SWD2 (as per Drawing Number LW09-660-04-300 Rev C).

Technical Committee's Evaluation

The TC recommends amending the emission point reference number in line with objections 33 and 36.

Recommendation:

Amend the heading of Schedule C.2.2 to read:

C.2.2 Monitoring of Storm Water discharge

Discharge Point Reference No:

SWD2 - outlet from a pipe from surface water attenuation pond (as per Drawing

Number LW09-660-04-300-005 Rev C)

Objection 38. Schedule C.6.2 Emission point reference numbers

Schedule C.6.2 states:

C.6.2 Receiving Water Monitoring

Location:

Upstream and downstream of SW1 (as per Drawing Number LW09-660-04-300-005 Rev B)

Control Parameter	Monitoring Frequency	Analysis Method/ Techniques
рН	Annually	pH electrode/meter with recorder
тос	Annually	On-line TOC meter with recorder
Total Ammonia (as N)	Annually	Standard Method
Chemical Oxygen Demand	Annually	Standard Method
Suspended Solids	Annually	Standard Method
Biochemical Oxygen Demand	Annually	Standard Method
Orthophosphate (as P)	Annually	Standard Method
Biological Quality (Q) Rating/Q Link	Annually	To be agreed by the Agency
Priority Substances Note 1	As required by the Agency	Standard Method

Note 1: The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to "Guidance on the Screening for Priority Substances for Waste Water Discharge Licences" issued by the Agency.

As per objection 33 regarding the identification of surface water monitoring points, the applicant requests that the emission point reference nos. be revised to:

SW1 Downstream surface water monitoring location (as per Drawing Number LW09-660-04-300 Rev C); and

SW2 Upstream surface water monitoring location (as per Drawing Number LW09-660-04-300 Rev C).

Technical Committee's Evaluation

The TC recommends amending the emission point reference number in line with objection 33.

Recommendation:

Amend heading of Schedule C.6.2 to read:

C.6.2 Receiving Water Monitoring

Locations:

SW1 Downstream surface water monitoring location (as per Drawing Number LW09-660-04-300 Rev C); and

SW2 Upstream surface water monitoring location (as per Drawing Number LW09-660-04-300 Rev C)

Objection 39. Schedule C.6.3 Groundwater monitoring frequency

Schedule C.6.3 states:

C.6.3 Groundwater Monitoring

Location:

GW1 (to be agreed by the Agency in advance of the commencement of the waste activity)

Parameter	Monitoring Frequency	Análysis
	principal de la companya del companya de la companya del companya de la companya	Method/Techniques
PH	Biannually	pH electrode/meter
COD	Biannually	Standard Method
Nitrate	Biannually	Standard Method
Total Ammonia	Biannually	Standard Method
Total Nitrogen	Biannually	Standard Method
Conductivity	Biannually	Standard Method
Chloride	Biannually	Standard Method
Fluoride	Biannually	Standard Method
Hazardous Compounds Notel	Biannually	Standard Method

Note 1: The relevant hazardous substances for monitoring in groundwater shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to the 'Classification of Hazardous and Non-hazardous Substances in Groundwater' issued by the Agency. Monitoring for the identified hazardous substances shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency

The applicant considers that annual rather than bi-annual monitoring is appropriate, because of the reduced risk of groundwater pollution associated with the facility. The reasons given by the applicant to support this assessment of risk include (i) the facility will occur over impermeable, concrete surfaces, (ii) spillages or firewater will be collected within the surface water collection system and contained within the storm water attenuation pond, (iii) all subsurface pipework will be installed under the construction quality assurance validation requirements of Condition 3.6.3.

Technical Committee's Evaluation

The TC considers the risk of groundwater pollution associated with this type of facility is relatively low and the annual groundwater monitoring will be sufficient.

Recommendation:

Amend Schedule C.6.3 to read:

C.6.3 Groundwater Monitoring

Location:

GW1 (to be agreed by the Agency in advance of the commencement of the waste activity)

Parameter	Monitoring Frequency	Analysis Method/Techniques
РН	Annual	pH electrode/meter
COD	Annual	Standard Method
Nitrate	Annual	Standard Method

Γ	Total Ammonia	Annual	Standard Method
	Total Nitrogen	Annual	Standard Method
	Conductivity	Annual	Standard Method
	Chloride	Annual	Standard Method
	Fluoride	Annual	Standard Method
	Hazardous Compounds Notel	Annual	Standard Method
			1

Note 1: The relevant hazardous substances for monitoring in groundwater shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to the 'Classification of Hazardous and Non-hazardous Substances in Groundwater' issued by the Agency. Monitoring for the identified hazardous substances shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency

Objection 40. Schedule E Annual Environmental Report

Schedule E:

SCHEDULE E: Annual Environmental Report

... Quantity and composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used). ... Review of Closure, restoration & aftercare management Plan.

The applicant requests that the requirement to provide the quantity and composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used) be reduced to the reporting period and the previous year. The applicant considers this would be more concise and more appropriate because the AERs for previous years would be readily available.

In addition, the applicant requests the review of the closure, restoration and aftercare management plan be amended to the review of the decommissioning management plan to reflect the term used in Condition 10.

Technical Committee's Evaluation

While the data may be available in each AER, the TC considers it preferable that all data related to the quantity and composition of waste recovered, received and disposed of is included in each AER, in order to highlight trends. It would be more difficult if reference had to be made to previous AERs.

The TC recommends amending the term closure, restoration and aftercare management plan, in line with Condition 10, as recommended in the responses to previous objections on this matter.

Recommendation:

Amend the following entry to Schedule E

Review of Closure, restoration & aftercare management Plan.

to read (amendment in bold):

Review of **Decommissioning and Residuals Management Plan**.

Recommendation

The TC recommends that the Board of the Agency grant a licence to the applicant

- (i) for the reasons outlined in the Proposed Decision, and
- (ii) subject to the conditions and reasons for same in the Proposed Decision, and
- (iii) subject to the amendments proposed in this report.

Signed

on behalf of John McEntagart, Inspector, and the Technical Committee

