

MEMO			
TO:	Board of Directors	FROM:	Michael Henry
CC:		DATE:	16 th July 2003
SUBJECT : Technical Committee Report on Objections to PD – Reg. No.118-1			

Application Details	
Applicant:	Marley Compost Ltd.
Location of Activity:	Crush, Carrickroe, Co. Monaghan
PD issued:	14/05/03
Objection received (one):	10/06/03
Submission on objections received:	N/A
Inspector:	Mr. Kealan Reynolds

Consideration of the objection

One objection was received from Patricia Murtagh, QED Engineering Limited on behalf of Marley Compost Ltd. The Technical Committee (Michael Henry, Chairperson, Caoimhin Nolan and John Gibbons committee members) has considered all of the issues raised and this report details the Committee's recommendations following the examination of the objection.

GROUND 1

Condition 1.5 and Schedule A of the licence limits the production process to the composting of "chicken litter" only, and to a maximum quantity of 9,000 tonnes per annum. The general term "poultry litter" should be used to allow for the acceptance of turkey litter as well as chicken litter. In the event of an outbreak of disease on poultry farms, the company will need to use alternative organic litter sources, such as pig slurry. The company also requests that the maximum limit of 9,000 tonnes per annum be increased as required, as markets demand in the future.

Technical Committees Evaluation:

The technical committee notes the applicants comments in relation to the waste type (i.e. chicken litter) specified in Schedule A. Having regard to the similar nature and composition of chicken litter and turkey litter, the technical committee considers that the term 'poultry litter' would be more appropriate. This would allow the applicant to accept chicken litter and/or turkey litter subject to the agreement of the Agency (see Note 1 to Schedule A). However, the technical committee do not consider that other waste types (e.g. pig slurry) should be allowed to be accepted. It is also not recommended that the total tonnage of 9,000 tonnes per annum be amended as this is line with information submitted as part of the waste licence application.

Recommendation:

Amend Schedule A by replacing 'Chicken Litter' with 'Poultry Litter' and replace 'Chicken Litter' with 'Poultry Litter' throughout waste licence.

Include the following definition of 'Poultry Litter' in Interpretation:

Poultry Litter Manure mixed with bedding material derived from chickens or turkeys

GROUND 2

Condition 2.1.1 requires a manager or deputy to be present on the facility at all times during its operation. Composting is a continuous process, 24 hours per day, hence "at all times" should be changed to "during office hours".

Technical Committees Evaluation:

The composting process is one which takes place on a continuous basis 24 hours per day. The technical committee acknowledges that it may not be possible for the facility manager or a suitable qualified and experienced deputy to be present at the facility late at night/early morning. Having regard to this, the technical committee recommends that the manager/deputy should be present as a minimum during the hours 08.00 to 19.00 (Monday to Friday) and 08.00 to 13.00 (Saturday) as specified in Condition 1.3. In addition, the technical committee considers that the Emergency Response Procedure (required under Condition 8.2) should be amended to account for hours outside those specified above.

Recommendation:

Amend Condition 2.1.1 as follows:
The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during the hours specified in Condition 1.3.
Amend Condition 8.2 as follows:
The licensee shall, within twelve months of the date of grant of this licence, submit a written Emergency Response/**Contingency Arrangements** Procedure to the Agency for its agreement. The procedure shall address any emergency situations which may originate on the facility (**including outside those hours specified in Condition 1.3**) and shall include provision for minimising the effects of any emergency on the environment. This shall **also** include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.

Ground No. 3

Condition 3.5.1 requires that the company survey all road/yard surfaces within 3 months of obtaining the licence. Three months for commissioning and completion of this work is impractical and therefore the company requests that this be changed to 6 months at least.

Technical Committees Evaluation:

Condition 3.5.1 requires an engineer to undertake a survey of all roads/yard surfaces at the facility within three months of the date of grant of the licence. Having regard to the poor state of some of the surfaces at the facility and the risk to groundwater, the technical committee considers that 3 months is adequate time to allow this survey to be completed.

Recommendation:

No Change.

GROUND 4

Condition 3.5.2 requires that all surfaced areas where contaminated surface water or process water arise is impermeable within 9 months of granting of the licence. Because yard areas cover a large area, this work will have to be done on a phased basis and the company requests that the timeframe be changed to 18 months to allow this work to be undertaken correctly.

Technical Committees Evaluation:

The survey required by Condition 3.5.1 will highlight which surfaces need to be upgraded/replaced at the facility. Taking into account the size of the yard areas and the works involved, the technical committee recommends that the timeframe for completion of the work required under Condition 3.5.2 be extended to 12 months from the date of grant of the licence.

Recommendation:

Amend Condition 3.5.2 as follows:
Within twelve months of the date of grant of this licence.....

GROUND 5

Condition 3.7.1 requires that the chicken litter and gypsum storage areas be fully enclosed within 9 months of granting of the licence. This will require some on-site works and the company requests this timeframe be increased to 18 months. The company also requests

that breathable membranes be used as side sheeting on these buildings on health and safety grounds. These membranes are widely used in Holland and Belgium.

Technical Committees Evaluation:

Condition 3.7.1 requires the chicken litter (amended to poultry litter under Ground 1 above) and gypsum storage areas to be fully enclosed within 9 months of the date of grant of the licence. The technical committee considers that it is not necessary for the gypsum storage areas to be enclosed. However, having regard to the potential for odours to arise from the litter storage areas, it is considered that they should be enclosed. The type of enclosed structure should be agreed with the Agency as a Specified Engineering Works (Schedule B) and the applicant should have regard to HSA Regulations when designing this. The timeframe for carrying out such works should remain unchanged.

Recommendation:

Amend Condition 3.7 as follows:

Storage Areas for Poultry Litter

Within nine months of the date of grant of this licence, the licensee shall provide fully enclosed structures which shall be constructed and maintained in a manner suitable, and be of size appropriate, for the storage of Poultry Litter.

Amend Schedule B to include:

Enclosure of poultry litter storage areas and various elements of process

GROUND 6

Condition 3.9.1 requires that a wheel cleaning facility be installed. Trucks delivering to and from the site do so on clean areas only, therefore there is no potential for process water to be carried off-site from vehicles. The requirement for wheel cleaning facilities is unnecessary and the company request that Condition 3.9 be removed.

Technical Committees Evaluation:

Condition 3.9.1 requires the provision of wheel cleaning facilities at the site and all vehicles leaving the facility must use them. This should ensure that no dirt/waste/contaminated water is carried off-site. This condition does not necessarily require the provision of a wheelwash and such a requirement could be fulfilled by other means (e.g. power wash, jet wash).

Recommendation:

No change.

GROUND 7

Condition 3.11.1(i) requires the bale breaking line and the blending line to be enclosed within 12 months. The company requests that this timeframe be extended to 18 months due to the large capital expenditure involved here.

Technical Committees Evaluation:

Having regard to the significant potential for dust, aerosol and odour emissions (see Odour Net report entitled 'Review of Odour Control Technologies in Mushroom Compost Production) and in order to minimise the risk of potential disease transfer off-site, the technical committee considers that the bale breaking, blending and poultry litter shredding should be carried out within an enclosed building at the timeframes specified in the PD.

Recommendation:

No change.

GROUND 8

Condition 3.13.2 requires that all process water storage tanks be enclosed within 12 months of granting of the licence. There are a number of water storage tanks at this site, so this work is proposed on a phased basis. The company requests that the timeframe of 12 months is changed to 9 months for the first phase, 16 months for the second, with all tanks covered within 24 months given the large capital expenditure involved in this work.

Condition 3.11.1(ii) requires that appropriate odour filtration systems be placed at outlet vents on all process/goodie water storage tanks and a system of aeration be installed on each process water storage tanks within 12 months of granting of the licence. Once the storage tanks have been enclosed, investigations into relevant odour control techniques from the vents will have to be made which will require a longer timeframe (24-36 months).

Technical Committees Evaluation:

The 'process/goodie' water storage areas were highlighted as a significant source of odour in the Odour Net reports commissioned on behalf of the Agency. The technical committee considers that such tanks should be enclosed and that a system of aeration and odour filtration should be provided in such tanks (under Specified Engineering Works). The timeframe for undertaking such works should remain at 12 months. For the purposes of clarity, the technical committee recommend that the term 'process water' be replaced with 'process/goodie water'.

Recommendation:

Replace 'process water' with 'process/goodie water' in Condition 3.11 and Condition 3.13.

GROUND 9

Condition 3.11.1(iii) requires all Phase I and Phase II production processes be carried out in fully enclosed buildings within 18 months. The company request that due to the large capital expenditure needed to complete this structure and the upset it will cause in the production area and processing system, a time frame of 24 months would be needed. The company also suggests that breathable membranes be used as side sheeting for any new Phase I and Phase II buildings for health and safety grounds.

In addition, the company request that it will need a 24 hour period to leave the Phase I compost outdoors in order to re-inoculate the micro life. This process is crucial for production of quality mushroom compost and is a practice common to Holland and Belgium.

Technical Committees Evaluation:

Condition 3.11.1 (iii) requires all of the Phase I and Phase II production process to be carried out in fully enclosed buildings within eighteen months of the date of grant of the licence. While some of the Phase I are partially enclosed, the Phase II process already takes place indoors. The technical committee notes that the Phase I process accounts for 72% of the total odour emissions arising from this facility whereas only 2% of the total odours arise from the Phase II process. On this basis, the technical committee recommends that the Phase I process (including the transfer of intermediate compost into the pasteurisation tunnels) should be fully enclosed (agreed with Agency as Specified Engineering Works) and the timeframe for completion of such works should remain at eighteen months from the date of grant of the licence.

Recommendation:

No change.

GROUND 10

Condition 3.11.1(iv) requires that a system of collecting air emissions from all production areas be installed within 24 months of granting of the licence. Because of the large area involved, the need for a large amount of research on successful technologies and the capital expenditure, the company requests that this timeframe be increased to 36 months.

Technical Committees Evaluation:

Having regard to the significant potential for odours to arise from the Phase I process, the technical committee considers that the timeframe for installation of the air collection system should remain unchanged. Likewise, the air collection system should be installed at the other significant sources of odours (i.e. poultry litter storage, process/goodie water storage tanks, bale breaking/blending lines, poultry litter shredding). However, it is considered that the requirement to collect the air emissions from the Phase II process should be removed on the basis that they are not a significant contributor to the overall odour emissions from the site. The technical committee also notes that an assessment of the effectiveness of the completed odour control works is required by Condition 3.11.2 and if needed, additional measures should be installed under Condition 3.11.3.

Recommendation:

Amend Condition 3.11.1 (iv) as follows:

Within twenty four months of the date of grant of this licence, the licensee shall provide a system for the collection of all air emissions **from the following sources:**

(i) poultry litter storage (ii) process/goodie water storage tanks (iii) bale breaking/blending lines, poultry litter shredding and Phase I process (up to and including transfer of intermediate compost into the pasteurisation tunnels). Negative pressure shall be maintained throughout **such areas** so as to ensure that there is no significant escape of fugitive odours.

GROUND 11

Condition 3.11.1(v) requires that all air emissions from the composting process are passed through an appropriate abatement system within 36 months of granting of the licence. The company requests that this timeframe be extended to 48 months to allow sufficient time to research the desired technologies. There is currently a lack of successful abatement technologies for Irish composting companies suited to Irish conditions currently available.

Technical Committees Evaluation:

The technical committee considers that technologies are available for the abatement of air/odour emissions from the composting process and these will have to be agreed with the Agency prior to their installation (under Specified Engineering Works). The timeframe for the installation of the air abatement system should remain at thirty-six months from the date of grant of the licence.

Recommendation:

No change

GROUND 12

Condition 3.12.1 requires that the surface water drainage system meet a certain minimum standard within 9 months of obtaining a licence. This will require on-site works and capital expenditure, so the company requests that this timeframe be extended to 15 months.

Technical Committees Evaluation:

The technical committee considers that the provision of surface water management infrastructure should coincide with the road/yard improvements required by Condition 3.5.2 and therefore the timeframe should be amended to within 12 months of the date of grant of the licence.

Recommendation:

Amend Condition 3.12.1 as follows:

Within twelve months of the date of grant of this licence.....

GROUND 13

Condition 3.16.1 requires that a telemetry system shall be installed and maintained at the facility within 9 months of granting of the licence. The company does not currently have a telemetry system in place and is not aware of this technology. In order to research all relevant issues pertaining to this subject, 18 months will be required to complete this project.

Technical Committee's Evaluation

The Technical Committee note from the inspector's report that a telemetry system is already in use at this facility for monitoring and controlling some aspects of the composting process. Condition 3.16.1 will require the development of this system to include additional areas of the facility (e.g. process/goodie water storage tanks), and a timeframe of twelve months is considered to be appropriate for the completion of this work.

Recommendation

Amend Condition 3.16.1 as follows:

Within twelve months of the date of grant of this licence.....

GROUND 14

Schedule E.2 requires that dust deposition be monitored at 4 locations, 3 times per year. Dust deposition monitoring carried out during the initial licence application concluded that the dust levels recorded at this site were not problematic, the levels were under 350 mg/m²/day and that they would not cause nuisance to nearby residents. Results from 3 other composting sites are provided and these confirm that dust deposition is not problematic on

mushroom composting sites. The company consider the dust monitoring specified in Schedule E.2 to be excessive and wish to change the stipulations to 2 locations (1 upwind and 1 downwind of the site), once per year only.

Technical Committee's Evaluation

The Technical Committee notes that submissions expressing concern over dust emissions from this facility were received during the application process. The dust monitoring requirements specified in Schedule E.2 are considered appropriate at this time. Condition 7.2 of the PD allows the Agency to amend the frequency, locations and scope of monitoring if necessary following on from the assessment of the dust monitoring results submitted.

Recommendation

No Change

GROUND 15

Schedule E.4 requires that noise be measured at 2 noise sensitive locations twice per year. Noise monitoring carried out during the initial licence application at one noise sensitive location demonstrates that noise from the facility does not impact on this noise sensitive location. The recorded noise level for over 90% of the measurement time was only 43.5 dB(A), which is well under the EPA limit of 55dB(A). The company consider the noise monitoring specified in Schedule E.4 to be excessive and request that the monitoring be changed to annually, for one noise sensitive location only.

Technical Committee's Evaluation

The Technical Committee notes that the noise monitoring data provided for the noise sensitive location referred to in the objection exhibited an $L(A)_{eq}$ of 68.2 dB, and that submissions expressing concern over noise emissions were also received during the application process. In view of this, the noise monitoring requirements specified in Schedule E.4 are considered appropriate at this time. Condition 7.2 of the PD allows the Agency to amend the frequency, locations and scope of monitoring if necessary.

Recommendation

No Change

GROUND 16

Schedule E.8 requires that treated sewage be monitored annually. There is no treated sewage generated on the site, so the company wishes to have this condition removed.

Technical Committee's Evaluation

The term 'treated sewage' refers to the sewage which is generated at the facility and is treated in the on-site septic tank system. The technical committee notes that Condition 3.14.1 of the PD requires any septic tanks in use at the facility to be in accordance with the Agency's Wastewater Treatment Manual entitled 'Treatment Systems for Single Houses'. The technical committee considers that this system should be monitored on an annual basis to verify the performance of the system and Condition 7.2 of the PD allows the Agency to amend the frequency, locations and scope of monitoring if necessary.

Recommendation

No Change

GROUND 17

Condition 11.1.1 requires that the company pay €15,539.84 annually to the EPA. This amount is excessive, given the cost already imposed by the waste licence on infrastructure, monitoring and reporting. The fee does not seem to be based on the scale of activities at this site, where only 9,000 tonnes of waste chicken litter is processed. The company request that this fee be reduced to reflect the size of the activities at this site.

Technical Committee's Evaluation

The Technical Committee considers that the annual contribution to be paid to the Agency which is specified in Condition 11.1.1 is appropriate and should remain unchanged. It is noted that the present wording of this Condition allows the Agency to alter this sum from time to time as it determines.

Recommendation

No Change

Signed: _____
Michael Henry
Technical Committee Chairperson