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CARLOW COUNTY COUNCIL

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Maire Buckley,
Programme Officer,
Office of Climate, Licensing & Resource Use,
EPA,
Regional Inspectorate,
Iniscarra,
Co. Cork.

Dated: 13.9.2010

Re: Pollution Prevention and Control (IPPC) licence application, Mr. Pat Roche,
Moanmore, Bagenalstown, Co. Carlow. (Reg No. P0825-01)

Madam,

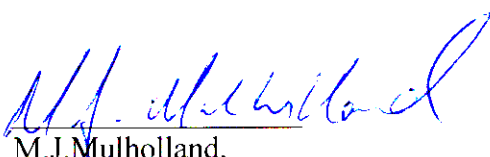
As per your correspondence dated August 28th last we have reviewed the application referred to above and wish to make the following comments.

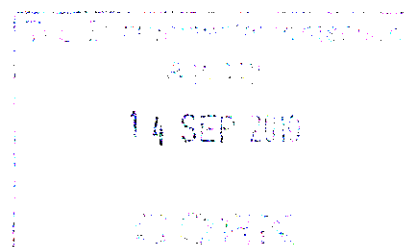
It is recommended that the IPC Licence include conditions that spreading of slurry be carried out in accordance with the attached Carlow County Council Guidance Document on the use of organic fertilisers.

The applicant should be requested to carry out an assessment of odour impacts in accordance with the document Odour Impacts and odour Emission Control Measures for Intensive Agriculture.

I request acknowledgement of these comments at your convenience.

Yours sincerely,


M.J. Mulholland,
Environment Section.




through the waters of time

DIRECT LINES CODE 059

Central Engineering Area	9172486
Muinebhac Area Engineer	91721418
Tullow Engineering Area	9136272
County Library	9170094
Fire Station	9131144
Motor Taxation	9170342
Driving Licence	9170343

Planning	9170307
Housing	9170368
Waste & Environment	9136230
Roads	9170379
Water Services	9136264
County Development Board	9170385
Loan Payments	9172489
Rent Payments	9172489

Human Resources	9170387
Information Technology	9136215
Community & Enterprise	9136205
Higher Education Grants	9170314
Rates	9172487
Register of Electors	9170313
Arts	9136209

CARLOW COUNTY COUNCIL

PROTOCOL FOR THE USE OF ORGANIC FERTILISER IN AGRICULTURE IN THE COUNTY OF CARLOW

1. GENERAL

The Guidance Document relates to the following organic fertilisers:

- Compost
- Sludge from Intensive Agricultural Enterprises.
- Spent Mushroom Compost

The EC (Good Agricultural Practice for Protection of Waters) Regulations 2009 (SI 101/2009) give legal effect to Ireland's national Nitrates Action Programme under the EU Nitrates Directive. Compliance with the Regulations requires protection of waters against pollution from agricultural sources and management of manures and fertilisers.

Farm inspections will be carried out as part of the nutrient management plan assessment process, inspections will also be carried out at the time of spreading.

2. DOCUMENTS TO BE SUBMITTED:

Sludge suppliers should note that all proposed nutrient management plans for spreadlands shall be submitted to Carlow County Council for assessment by March 1st each year, or 4 weeks in advance of spreading, whichever is the earliest. There will be an assessment period of at least 4 weeks for all NMP's submitted and no organic fertiliser should be spread before written approval of the plans are received.

The Nutrient Management Plan for each spreadland.

Copy of soil testing lab reports and a summary sheet for test results.

Test results for the organic fertiliser as % dry solids (**this is required to be carried out in the same calendar year as land application**).

Technical assessments of nutrient content and percentage availability.

Location map of spreadlands at 1:50,000 scale.

Spreadlands map for each farm holding (scale 1:2500), area to be spread outlined in red and any adjoining land in the same ownership outlined in blue.

A detailed map of each plot (scale 1:2500), showing all sludge storage points, water courses, buffer zones and prohibited areas, boreholes, residences, sensitive buildings, pNHA/SAC's, areas of rock outcrop and any other relevant information.

3. CONTENTS OF NMP

The Plan will include, but be not limited to, the following:

- Maps of spreadlands and exclusion areas as outlined above.
- Compliance with the following as applicable:
 - Nutrient Management Guidelines for Local Authorities
 - Local Government (Water Pollution) Acts 1977-2007
 - S.I. 101, 2009
 - Conditions for Approval and Operation of Composting Plants Treating Animal B-Products in Ireland.
 - Conditions for Approval and Operation of Biogas Plants Treating Animal B-Products in Ireland.
 - EPA IPC/IPPC Guidelines (amended table 11B attached)
- One page summary of groundwater vulnerability assessment (the main study will be included as an appendix).
- Soil test original reports.
- Organic fertiliser original test reports.
- Summary sheet of farm activities showing total area, livestock numbers, forage areas, arable areas, stocking rate etc.
- Table showing all plot areas and exclusion areas with notes on exclusion criteria.
- Full Nutrient / Fertiliser Plan for **all** plots for P, N. (The total farm holding must be included)
- Check on sludge loading rates based on max. hydraulic loadings.
- Letter from the NMP Planner, including professional qualifications, confirming that the plan conforms to the EC (Good Agricultural Practice for Protection of Waters) Regulations, 2009 (SI 101/2009).
- The submission format will be as follows:
 - Main Plan: PDF
 - Groundwater Vulnerability Assessment: PDF.
 - Mapping: PDF, MapInfo files
 - Test results: PDF

4. GROUNDWATER VULNERABILITY ASSESSMENT

The groundwater vulnerability assessment will be carried out for all spread plots in accordance with:

- Landspreading of Organic Waste: Guidance on Groundwater Vulnerability Assessment of Land, 2004.
- Groundwater Protection Responses for Landspreading of Organic Waste, 1999.

The assessment is required to include a groundwater vulnerability assessment and completed response matrix for landspreading as outlined in the above publications.

The assessment is required to include on-site subsoil investigations in order to determine soil depths in "extreme" vulnerability locations.

The assessment will include a baseline water quality study if there is a sensitive receptor (ie well) downgradient of the spreadlands.. This will be done by sampling the aquifer for the following:

- PH
- Nitrate
- Ammonia
- Total coliforms
- Faecal coliforms.

6. DECISION OF CARLOW COUNTY COUNCIL

Carlow County Council will assess the submission to ensure compliance with the necessary standards and guidelines. Carlow County Council will notify the supplier of the findings of their assessment and suitability for landspreading.

Carlow County Council may require appropriate measures to be taken by the sludge supplier to protect waters from pollution e.g. leachate collection from storage areas to protect groundwater and surface water, record keeping and reporting requirements, other relevant measures depending on circumstances.

7. SLUDGE SPREADING ACTIVITY

Prior notification of all spreading activity must be given to Carlow County Council by March 1st (or four weeks in advance of spreading, whichever is earliest) each year.

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8. COMPLIANCE

Carlow County Council is responsible for the supervision of the supply and use of sludge in agriculture in the County of Carlow and shall carry out inspections of such activity. A copy of the Nutrient Management Plan should be maintained on site by all landowners in accordance with SI 101/2009.

10. LEGAL

These notes are for guidance only and do not purport to be a legal interpretation of the (Water Pollution) Acts 1977 and 1990, the Waste Management Act, 1996 and any other environmental legislation.

11. SUMMARY OF REPORTING REQUIREMENTS

- Sludge suppliers should note that all proposed nutrient management plans for spreadlands shall be submitted to Carlow County Council for assessment by March 1st each year, or 4 weeks in advance of spreading, whichever is the earliest. There will be an assessment period of at least 4 weeks for all NMP's submitted and no organic fertiliser should be spread before written approval of the plans are received.
- On completion of landspreading operations at the end of each year a summary of actual spreading at each farm must be submitted to Carlow County Council.
- Plans are year specific and separate plans are required to be submitted for each calendar year. The plan should state the approximate time of application (ie winter 2010).
- Plans are required to examine the complete farm holding.

12. TABLES REQUIRED

- LPIs plot gross areas, buffer zones and net spreading areas
- Stock numbers and on-farm slurry generation.
- Crop types, N/P indices and total N/P requirements, as Table IIB
- Nutrient Plan showing on-farm slurry, imported slurry and chemical fertiliser, as Table IIB
- Summary sheet for plot metal applications (where significant amounts of sewage sludge to compost)
- Summary sheet for plot metal and P levels (where significant amounts of sewage sludge to compost)
- Groundwater vulnerability

13. INSPECTIONS

Landowners should be made aware that un-notified farm inspections may be carried out by Carlow County Council as (a) part of the nutrient management plan assessment and (b) in order to monitor spreading operations. They should also be made aware of the cross-reporting requirements of SI 101/2009 and that this may entail submission of inspection findings to DAFF.

14. TESTS REQUIRED

Soil Phosphorus

- Soil tests in accordance SI 101/2009, Schedule 1
- Sampling area should not exceed 4 hectares
- Composite sample at 20 locations
- Depth = 100mm
- Sampling period of 3 years

Soil Organic matter, PH, Clay Content

- As above

Soil Metals (where sewage sludge content)

- Sampling area should not exceed 5 hectares
- Sampling period of 5 years, may be more frequent if levels are elevated
- Depth = 250mm

Spread Material

- Nitrogen
- Potassium
- Phosphorus
- Percentage dry solids
- If sludge content as per Code of Practice
- If compost as per permit conditions
- Tests required twice per annum or as per permit/planning conditions

Photocopy/scan of original results to be attached to plan.

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BIOGRAPHICAL

Farmer/landowner name:

Farmer Address:

Farmer reference code:

Concentration of P in on-farm slurry:

Available P in on-farm slurry:

Concentration of P in imported slurry:

Available P in imported slurry:

Field ID	Total Area	Usable Area	Soil P test	Date	P index	Crop	P reqd kg/P/ha (note 1)	Total P reqd kg/plot
Totals								

[illegible]

Note 1: if different from SI 101/2009 give details

Table 11B (ii) for N calculations.

Farmer/landowner name:

Farmer Address:

Farmer reference code:

Concentration of N in on-farm slurry:

Available N in on-farm slurry:

Concentration of N in imported slurry:

Available N in imported slurry:

On farm Organic kg/N/ha:

Imported Organic kg/N/ha:

Grassland Stocking Rate:

Whole Farm Stocking Rate:

Field ID	Total Area	Usable Area	N index	Crop	N reqd kg/N/ha (Note 2)	Total N reqd Kg/N/plot
Totals						

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Field ID	Volume of on-farm slurry m ³ /ha	N in on-farm slurry kg/N/ha	N in on-farm slurry Kg/N/plot	Imported slurry to be applied m ³ /ha	N in imported slurry kg/N/ha	Imported slurry kg/N/plot	Imported slurry m ³ /plot	Chemical N kg/N/ha	Chemical N kg/P/plot
Totals									

Note 2: if different from SI 101/2009 give details

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Final Spread Record Form S5

S5.1
S5.2

S5.3

S5.4

S5.5
S5.6
S5.7
S5.8
S5.9

S5.10

S5.11

Landowner	
Farm Address	
Planner	
Total Tonnage	
Biosolids Source	
Dry Solids %	
Spread Dates	
Contractor	
NMP Reference Number	
Date of NMP Approval	
Signature of Landowner	
date	

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Odour Impacts and Odour Emission Control Measures for Intensive Agriculture

FINAL REPORT



EUROPEAN COMMUNITY

European Regional
Development Fund

