EUROPEAN COMMUNITIES (USE OF SEWAGE SLUDGE IN AGRICULTURE) REGULATIONS 1991

The Minister for the Environment in exercise of the powers conferred on him by section 3 of the European Communities Act, 1972 (No. 27 of 1972) and for the purpose of giving effect to the Council Directive of 12 June, 1986 (No. 86/278/EEC) hereby makes the following Regulations:

REG 1

1. (1) These Regulations may be cited as the European Communities (Use of Sewage Sludge in Agriculture) Regulations, 1991.
(2) These Regulations shall come into operation on the first day of August, 1991.

REG 2

2. In these Regulations:
a reference to the Schedule or an article which is not otherwise identified is a reference to the Schedule or an article of these Regulations;
a reference to a sub-article which is not otherwise identified is a reference to a sub-article of the provision in which the reference occurs;
"agriculture" means the growing of all types of commercial food crops, including food crops for stock-rearing purposes;
"authorised person" means a person appointed by a local authority to be an authorised person for the purposes of these Regulations;
"local authority" means—
(a) in the case of a county borough, the corporation of the county borough,
(b) in the case of any other administrative county, the council of the county,
and references to the functional area of a local authority shall be construed accordingly;
"the Minister" means the Minister for the Environment;
"premises" includes land whether or not there are any structures on the land for the treatment of sewage or for the treatment, storage or use of sludge;
"sanitary authority" means a sanitary authority for the purposes of the Local Government (Sanitary Services) Acts, 1878 to 1964;
"sludge" means

(i) residual sludge from sewage plants treating domestic or urban waste waters and from other sewage plants treating waste waters of a composition similar to domestic and urban waste waters;
(ii) residual sludge from septic tanks and other similar installations for the treatment of sewage;
(iii) residual sludge from sewage plants other than those referred to in (i) and (ii);
"sludge register" means the register established and maintained under article 8;
"supplier" includes a sanitary authority;

"treated sludge" means sludge which has undergone biological, chemical or heat treatment, long-term storage or any other appropriate process so as significantly to reduce its fermentability and the health hazards resulting from its use;
"use" means the spreading of sludge on the soil or any other application of sludge on and in the soil.

REG 3

3. (1) Sludge shall not be used or supplied for use in agriculture except in accordance with these Regulations.
(2) Subject to sub-articles (3) and (4), only treated sludge may be used in agriculture.
(3) Untreated sludge may be used in agriculture provided that it is previously injected or otherwise worked into the soil.
(4) Residual sludge from septic tanks may be used on grassland provided that the grassland is not grazed within six months following such use.

REG 4

4. A person shall in using sludge in agriculture:
(a) take account of the nutrient needs of plants,
(b) ensure that the quality of soil, of surface water and of groundwater is not impaired,
(c) have regard to the increased mobility and availability to crops of heavy metals where the sludge is used on soil of which the pH is less than 6.

REG 5

5. (1) Sludge shall not be used or supplied for use on:
(a) soil in which fruit, other than fruit trees, or vegetable crops are growing, or
(b) ground intended for the cultivation of fruit or vegetable crops which are normally in direct contact with the soil and eaten raw, for a period commencing ten months prior to harvesting, and during harvesting.
(2) Treated sludge shall not be used or supplied for use on grassland or forage crops where the grassland is to be grazed or the forage crops to be harvested within three weeks of such use.

REG 6

6. (1) Sludge shall not be used on soil where the concentration of one or more heavy metals in the said soil exceeds the values specified in Part I of the Schedule, or the use of the sludge may result in these values being exceeded.
(2) For the purposes of sub-article (1),
(a) the maximum amount of sludge which may be applied to soil shall be two tonnes of dry matter per hectare per year, and
(b) the values specified in Part II of the Schedule for heavy metal concentration in sludge shall be observed.

REG 7

7. (1) Before sludge is used on agricultural land the soil of such land shall be analysed in accordance with the conditions set out in Part III of the Schedule.
(2) Sludge shall be analysed in accordance with the conditions set out in Part IV of the Schedule.
(3) For the purposes of sub-articles (1) and (2) the methods of analysis set out in Part V of the Schedule shall be used.

REG 8

8. (1) A supplier of sludge for use in agriculture shall regularly provide users of the sludge with the results of sludge analyses carried out in accordance with Part IV of the Schedule.
(2) Each local authority shall establish and maintain a register to be known as "the sludge register" and shall enter on to the register—
(a) the quantities of sludge produced and the quantities supplied for use in agriculture in their functional area,
(b) the composition and properties of the sludge having regard to the parameters referred to in Part II of the Schedule,
(c) the treatment which the sludge has undergone having regard to the types of treatment referred to in article 2,
(d) the name and address of each recipient of the sludge and the location of each site where the sludge is to be used.
(3) A supplier of sludge for use in agriculture shall notify the local authority in whose functional area the sludge is to be used of the particulars set out in sub-article (2) (a) to (d) for entry on to the register.
(4) The register shall be kept at the offices of the local authority and shall be available for inspection by any person at the offices of the local authority during office hours.

REG 9

9. Article 8 (1) and (2) (b), (c) and (d), shall not apply to sludge from septic tanks or from sewage treatment plants with a treatment capacity below 300 kg BOD5 per day, corresponding to a population equivalent of 5,000 persons, and designed primarily for the treatment of domestic waste water.

REG 10

10. A local authority shall be responsible for the supervision of the supply and use of sludge in agriculture in their functional area.

REG 11

11. (1) An authorised person may inspect and examine any sewage plant, septic tank or other similar installation for the treatment of sewage, any sludge being treated, stored, transported or used and any installation, plant or vehicle for such purposes.
(2) An authorised person may at any reasonable time enter and inspect any premises for the purposes of sub-article (1).
(3) When exercising any power conferred by these Regulations, an authorised person shall, if so required, produce evidence of his authority.

REG 12

12. A person who contravenes or fails to comply with a provision of these Regulations or who obstructs or interferes with an authorised person in the exercise of a power conferrred by these Regulations shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding £1,000 or, at the discretion of the Court, to imprisonment for a term not exceeding six months or to both such fine and such imprisonment.

REG 13

13. A prosecution for an offence under these Regulations may be taken by the local authority in whose functional area the offence is committed.

REG 14

14. The Minister may, from time to time, issue recommendations to local authorities in relation to the carrying out of any of their duties under these Regulations, and local authorities shall have regard to any such recommendations.

SCHEDULE

PART I
Maximum Values for Concentrations of Heavy Metals in Soil.

ParametersMaximum Values*Expression of ResultsCadmium1mg/kg of dry matter in a representative sample, as defined in Part III of this Schedule of soil with a pH of 5 to 7.Copper50Nickel30Lead50Zinc150Mercury1
*Where the pH of the soil is consistently higher than 7, the values set may be exceeded by not more than 50%, provided that there is no resulting hazard to human health, the environment, or in particular, ground water.
PART II
Maximum Values for Concentrations of Heavy Metals in Sludge for Use

in Agriculture.

ParametersMaximum ValuesExpression of ResultsCadmium20}mg/kg of dry matterCopper1,000Nickel300Lead750Zinc2,500Mercury16

PART III

Conditions Applying to Soil Sampling and Analysis.

1. A soil analysis shall cover:—

(a) the parameters included in Part I of this Schedule, and

(b) pH.

2. Samples taken for analysis shall be representative of the soil on the site and shall be made up by mixing together twenty five core samples taken over each area of five hectares or less used for the same agricultural purpose.

3. (a) Except where sludge is used on grassland, samples shall be taken to a depth of twenty five centimetres or the depth of the surface soil if less, provided that such lesser sampling depth is at least ten centimetres.

(b) Where sludge is used on grassland, samples shall be taken to a depth of not more than six centimetres.

4. Where sludge is regularly used in agriculture soil shall be analysed at a minimum frequency of once in ten years.

PART IV

Conditions Applying to Sludge Sampling and Analysis.

1. A sludge analysis shall cover:

(a) the parameters included in Part II of this Schedule, and

(b) the following parameters:

—dry matter, organic matter,

—pH,

—nitrogen and phosphorus.

2. Samples of sludge for analysis shall be representative of the sludge production and shall be taken before delivery to the user.

3. Subject to sub-paragraphs (a) and (b), sludge other than sludge referred to in paragraph 6 shall be analysed at least once every six months.

(a) The frequency of sludge analyses may be reduced to once a year where the results of analysis do not vary significantly over a full year.

(b) The frequency of sludge analysis shall be increased where changes occur in the characteristics of the waste water being treated.

4. Where it is evident, on the basis of analysis, that copper and zinc are either not present or are present only in negligible quantities in the waste water treated by the sewage treatment plant, the frequency of analyses for those parameters may be reduced to once in three years.

5. A person, other than a local authority, producing sludge for use in agriculture shall not reduce the frequency of analyses under conditions 3 or 4 without the prior approval of the local authority in whose functional area the sludge is produced.

6. In the case of sludge from a septic tank or sewage treatment plant referred to in article 9:—

(a) a sludge analysis shall be carried out—

(i) within twelve months of the coming into operation of these Regulations, where such analysis has not been undertaken within the preceding twelve months, or

(ii) within six months after the commencement of the use of such sludge in agriculture.
(b) the frequency of sludge analyses may be reduced to not less than once in five years provided that, in the initial analysis, the values for the concentrations of heavy metals are lower than the values shown in Part II of this Schedule, and there is no change in the characteristics of the waste water being treated.

PART V

Methods of Analysis.

1. Analysis for heavy metals shall be carried out following strong acid digestion.
2. The reference method of analysis shall be atomic absorption spectrometry.
3. The limit of detection for each metal shall be no greater than 10% of the maximum value for that metal.

GIVEN under the Official Seal of the Minister for the Environment, this 8th day of July, 1991.
PADRAIG FLYNN,
Minister for the Environment.

EXPLANATORY NOTE.

These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations give effect to Council Directive No. 86/278/EEC of 12th June, 1986 (O.J. No. L.181/6, 4th July, 1986), relating to the protection of the environment and in particular of the soil when sewage sludge is used in agriculture.