Annex II: "Third Action Programme Nitrates Directive (2004-07)", technical comments

1. In relation to point 3 "System of application standard" we agree with your proposal that it will be based on forfeits (nitrogen standards for the different livestock categories) calculated from nitrogen excretion after deducting nitrogen losses in stables and storages, with the possibility for farmers to demonstrate through sound scientific methodology, any deviation from such standards. However, this also means that, where results unfavourable to the farmer are achieved, he would have to accept and apply them. You need to clarify this. In your document you don't specify the animal categories to which this option will apply nor the rationale behind it. We note that, in relation to dairy cattle, you are addressing your research towards the possible correlation of nitrogen excretion and urea content in milk. We confirm that we will analyze carefully the scientific results which you will provide to support this proposal. We planned, for the second half of 2004, a workshop on nutrient excretion from livestock which will address also the issues of the methods to reduce nutrient excretion and of indicators of utilisation efficiency of nutrients in diets. In addition to the scientific basis for deviations from the general standard, we will attribute great relevance also to the system of controls to ensure the compliance by the farmers who make use of this option. In relation to the values proposed, as examples, for excretion forfeits in table 3, we note that they are lower than those proposed by other MS with similar performance (ie Denmark), in particular for dairy cattle and sows. We would like you to provide detailed information on the standard in place for all livestock categories during the third action programme (2004-2007), the reference regulation and the steps involved in any possible modification of the standards.

2. In relation to the evaluation of input and output of manure and evaluation of stock differences we see it as a relevant issue to ensure the control of manure movements. We understand that manure transport is performed under the waste regulation, and therefore recording and penalties are dealt with in this regulation. We would like to get further information on the relevance of manure stock difference (for instance, if you have data on average percentage of manure which are not managed the same year) in relation to the relevance attributed to this item in the evaluation of "manure balance".

3. With reference to farm acreage please provide the Commission with further detail in relation to the farmland which is considered for its calculation, in particular if the farm acreage corresponds to utilised agricultural land, if UAA is considered without any exclusion and whether the area where fertiliser application is forbidden (ie near water courses) is excluded from the calculation.

4. In the paragraph on application standards for manure, and in particular in the section related to the calculation for the farm, you make a specific reference to intensive livestock farms, which have to ship out a large amount of manure and foresee the possibility of a supplementary regulations for them. We concur that particular efforts should be addressed to ensure a proper manure management and would like to have more information on the foreseen field of application of the new regulation and in particular if it will address a targeted system of control and/or also other items (i.e. provisions in relation to participation in treatment systems, commitments to reduce the surplus, tightening of quota system, economic incentives to reduce surplus etc. These remarks have as a background the longstanding view frequently expressed by

DG ENV with regard to farmers producing excess manure needing to take full responsibility for the treatment of this manure if they wish to remain in business).

5. In relation to paragraph 3.3, application standards for total nitrogen fertilisation, we take note that your new system will be based on the provisions of Annex III 1.3 of the nitrates directive and will ensure that fertilisation will be based on equilibrium between crop nutrient requirement and the different nitrogen sources (mineral N in soil profile in spring, N from mineralization during the growing season, N from chemical fertiliser and manure). Substantial aspects of your proposed approach, such as the evaluation of the percentage of available nitrogen from manure and other fertiliser application, are not yet available. We await this key information with great interest and expect it to be clearly presented in considerable detail. As you know, in the context of the Danish derogation (Commission decision 2002/915/EC) the Commission has evaluated positively the measures of the action programme aimed at reducing the nitrogen losses from livestock manure through an efficient utilisation, ensuring a minimum of 65% average N efficiency. Minimum efficiency according to the Danish Order n.609 of 18 July 2002, on the Agricultural use of fertilisers and on plant cover in the planning period 2002/2003 is set at: 75% for pig slurry, 70% for cattle slurry, 45% for deep litter, 65% for other manure, calculated on total nitrogen content of manure. The associated N content of manure is, for instance, 114-123 kg/ head for dairy cattle and of 23,4 kg N/ha for sows with piglets up to 7 kg. In relation to fertilisation, the recommendations were set 10% below the agronomic optimum as a general rule.

6. In awaiting for the scientific elements which will be the basis for the adjustments of the agronomic recommendations to the environmental targets we highlight that the directive, in paragraph 1.2 of annex 2 requires a balance between input and output and we, therefore, see substantial difficulties in your proposed approach to calculate the adjustments, based on “acceptable surplus”. Moreover, we recall that environmental targets should include not only the criteria of 50 mg/l nitrate in groundwater but also the eutrophication criterion, which could require a substantially lower concentration in surface water.

7. In relation to your statement that nitrogen contributions like mineral nitrogen in soil profile in spring, nitrogen which became available during the growing season, (included nitrogen release from previous leguminous crops or from permanent grassland following ploughing), deposition, will be “automatically” included in the fertilisation recommendations, we see difficulties, due to the large number of factors involved. This will need to be discussed. Also, the proposed approach to take into account the net mineralization contribution only in the case of peat soils requires further discussion. Clarifications are needed on how the nitrogen fluxes which originate, for instance, from ploughing of grassland or which follow a leguminous crop are properly considered to avoid over-fertilisation and substantial nitrogen losses to water. The solution found with respect to the derogation may need to be included in the action programme.

8. Some of the agronomic fertilisation recommendations (as those listed in table 4) seem to be very high (this is the case, for instance, of winter wheat and barley). Moreover, the reference to the range of 250-400 kg N as application standard for grassland should take into account the latest outcome of the review of ERM study, which reduce the range to 250-300 kg N. The level of 400 kg N was, in fact, not agreed in the Nitrates management committee: it was discussed, but some MS

strongly opposed to it by writing and ADAS corrected its document. As a general comment, we highlight that we need the scientific evidences which will support your application standards. We recall that the efficiency of manure N plays a major role.

9. We appreciate your approach to include both nitrogen and phosphate application standards. Our comments in point 1 above, on nitrogen, apply also to phosphorus. In relation to phosphate application standards you anticipate that they will primarily derive from current loss standards. We see difficulties to concur with this approach, in particular in the case of P saturated soils. We recall that you have already indicated very high levels of saturation in large parts of the Netherlands. We emphasize the need to reach, as soon as possible, the P zero balance in P saturated soil, as any delay could result in an infringement of the non deterioration clause under the dangerous substances directive. The revision of the Fertiliser Law would have to include clear non reversible steps in the direction of zero balance.

10. During our discussion before the ECJ decision, it was anticipated that a revision of the areas of soils prone to leaching was underway (What was the extension of sand/ loessial soils before the year 2002 Fertiliser Law evaluation? What is present extension?). Could you confirm your intention that the expansion will have effect not immediately, after the assessment of spring 2004, but in 2006, apparently as part of P application standard? This delay seems not to be justified.

11. We are concerned by the opportunity to apply phosphate beyond the application standards for farmers who demonstrate that soils are phosphate fixing or poor in phosphate. Firstly because you anticipated that phosphate standards will be higher than the P crop requirement, and no commitment to reach a zero balance was provided in your documents. Secondly because this opportunity seems to open the door to the use of a vast amount of phosphate, for instance in the case of the application of the derogation.

12. In relation to point 4 of your document, and in particular to the regulation governing manure storage and application of fertilisers, your paper recalls that rules were drawn up after December 1999. On this issue we are of the opinion that further improvements on application of fertilisers are needed (see points below) and should be operational as soon as possible.

13. Provisions in place on prohibition periods for application of mineral fertilisers (paragraph 4.2) include exceptions which we do not think justified, such as the generalised absence of prohibition for urea application on fruit and on field vegetables. Moreover, the more detailed information provided on the matter in point 6 of your document, summarizing the provisions of the fertiliser law, show that no prohibition period applies to manure on arable land, outside the area designated in the category of “sandy soils”(the latter, up to now, should correspond to 140.000 ha over a total of about 1.962.000 ha in NL) and therefore no prohibition applies on clay soils, peat soils and sandy soils of class VI. Our opinion is that prohibition should also apply to arable, fallow and uncultivated land for which manure application after cropping and during autumn and winter has no agronomic justification (no or minimal crop demand) and could lead to nitrogen losses.

    We see some discrepancies, however, between the synthesis provided in your document and the Fertiliser Law, the Decree 23 July 2001, in relation to prohibition periods for the application of chemical fertilisers. The Decree 23 July 2001 appears

to permit the application of nitrogen chemical fertilisers from 16 September to 15 October only to soils where fruits and the following vegetables are grown: cauliflower, spinach, lettuce and sprouts (and not in sandy soils). The possibility to spread urea seems to be limited to fruits up to 15 November, and it is limited to 20 kg/ha (prohibition of urea application remains from 15 November to 31 January; furthermore between 16 September and 15 November the maximum application is 20 kg/ha. If this is the case, the amount of 20 kg/ha mentioned in the explanatory memorandum of the Decree should be included in the text of the article).

14. On limitation of application of fertilisers on slopes, the prohibitions set by Fertiliser Law refers to very specific conditions:

    – application of animal manure and fertilisers on slopes 7% of inclination or more, on soil affected by gully erosion with the gullies of more than 30 cm depth: what does this mean in the Dutch situation?

    – application of manure on uncultivated land (bare soil?), with more than 7% inclination, with however the possibility to spread on slopes up to 18% inclination if a crop which ensures soil cover is seeded within 8 days from spreading, or even if maize, potatoes or beet (crops which grow on strips) are seeded in case the length of the field is less than 300 m.: what is the extent of land above 18% slope in NL?

    Those provisions could not be considered sufficient for water protection as the prohibition for soils prone to erosion refers only to extreme conditions; the slope of 18% to spread manure on uncultivated land is too steep to prevent nutrient surface or subsurface runoff, in particular when the width of buffer strips near water courses is too narrow. In this latter case, also the condition of seeding within 8 days appears insufficient to prevent runoff until the new crop is established. The possibility to spread manure up to the 18% inclination for maize, beet and potatoes allowed in some cases, would result in the possibility of significant nutrient losses to water, according to evidence of the literature, summarised also in a Commission study (ERM study on Action Programmes). Therefore we would like NL to provide us the scientific basis for the above mentioned exceptions.

15. No prohibition of spreading of solid manure on frozen soil and on snow covered soil is established.

16. On conditions for application of fertilisers near water courses, we evaluate the present NL provisions largely insufficient for water protection. According to the conclusion of a review on the different measures to be included in action programmes prepared by the Commission and discussed in the nitrate Committee, buffer strips of 10 m wide should be considered as a general rule. Narrow buffer strips 5 m wide could be considered in case of narrow fields with slope up to 3%. This is far beyond the width of unfertilised area of 25 cm for cereals and grasslands, 50 cm for other arable crops and the 150 cm for fruit trees foreseen by the present NL regulation. Therefore we think that substantial improvements are needed, both in terms of width of the non fertilised area and of obligations for adoption of buffer strips to ensure removal of nutrients near water courses.

17. Monitoring programmes should address groundwater and surface water (50 mg nitrate criterion and trophic status).