EXPLANATORY MEMORANDUM TO

THE NITRATE POLLUTION PREVENTION (AMENDMENT) AND WATER RESOURCES (CONTROL OF POLLUTION) (SILAGE, SLURRY AND AGRICULTURAL FUEL OIL) (ENGLAND) (AMENDMENT) REGULATIONS 2013

2013 No. 1001

1. This explanatory memorandum has been prepared by the Department for Environment, Food and Rural Affairs and is laid before Parliament by Command of Her Majesty.

2. Purpose of the instrument

2.1 These Regulations amend the Nitrate Pollution Prevention Regulations 2008 ("the 2008 Regulations"), which give effect in England to Council Directive 91/676/EEC (OJ L375, 31.12.1991, p. 1) ("the Nitrates Directive"). They also give statutory effect to the revised designation of nitrate vulnerable zones in England, and amend the measures required to be undertaken by farmers within the nitrate vulnerable zones. They also make provision exempting certain grassland farmers from aspects of the measures.

2.2 These Regulations also amend a notification requirement under the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 ("the 2010 Regulations").

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 The Department decided not to consolidate the 2008 Regulations on this occasion but intends to do so when the action programme measures for which the 2008 Regulations provide (explained more fully below) are further revised. In the intervening period, one small amendment may be needed later in the year to recognise any changes to the areas designated nitrate vulnerable zones resulting from the statutory appeals process provided for in Part 2 of the 2008 Regulations. By the time these Regulations are in force, the Defra website will contain a consolidated version of the 2008 Regulations so that the effect of these amendments is clear.

3.2 These Regulations amend two sets of Regulations: this reflects the close link between the legislation in so far as controls on sources of nitrate pollution are concerned. The 2010 Regulations support the implementation of the action programme measures in England, in that they provide for standards that slurry storage systems on farms in England must meet, while the 2008 Regulations make other provision in respect of slurry storage, including use and capacity of storage facilities, in the nitrate vulnerable zones.

3.3 The Committee may also be interested to note paragraphs 4.5 to 4.7 below.

4. Legislative Context

4.1 We are required by the Nitrates Directive to set action programme measures in areas of land draining into waters designated vulnerable to nitrate pollution. Article 5.7 requires the action programme measures to be reviewed every four years, and revised as necessary in the light of new evidence or changes to farming practices. Article 3.4 requires Member States to review the designation of nitrate vulnerable zones. These Regulations amend the 2008 Regulations to give statutory effect to the Secretary of State's revised zones, and to update our action programme measures. The Government published its Response on 28th August 2012 following consultation, and took account of stakeholders' evidence. These Regulations implement that policy.

4.2 The four-yearly review requires the identification of polluted waters or potentially polluted waters. These are waters where nitrate levels exceed 50mg per litre, or surface waters which are eutrophic¹, or where this could occur if measures under the action programme were not put in place. The Directive then requires the designation of the areas of land that drain into those waters as nitrate vulnerable zones.

4.3 The Environment Agency recommended areas for designation in England to the Secretary of State in August 2012. The Secretary of State published his proposals and served notice on owners or occupiers of holdings in the proposed zones. Farmers were able to appeal against the proposed designation of their land. These Regulations give statutory effect to the revised designation of nitrate vulnerable zones, reflecting the outcome of those appeals decided as at the 12th February 2013. Those appeals which were upheld after that date and before the making of these Regulations and which could not be reflected in the maps (due to the time taken for the administrative and technical processes required to produce such maps) are expressly excluded from the nitrate vulnerable zones, reflecting the requirements in regulation 11D of the 2008 Regulations. The maps will be further revised to reflect these cases, and will be recognised in a further planned amendment (see paragraph 4.9 below).

4.4 The review must also consider the effectiveness of the action programme. The measures of the action programme impose certain farming practices intended to avoid and reduce pollution of waters from nitrates. These measures must be observed by farmers whose land is within a nitrate vulnerable zone. These Regulations amend some of those measures and follow a full consultation (described below). The key changes to the action programme measures are set out in section 7 below.

4.5 These Regulations also provide for an exemption, or derogation, from one of the main provisions of the Nitrates Directive in England, the previous one having expired on 31st December 2012. Farmers granted a derogation will benefit from a higher application rate of manure nitrogen from grazing livestock than would otherwise be the case. The increase is from 170 kg per hectare per year which ordinarily applies, averaged over an individual farm, to a limit of 250 kg nitrogen, subject to the farmer meeting certain conditions (set out in

¹ Eutrophication is defined in the Directive as the enrichment of water by nitrogen compounds, causing accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms in the water and water quality.

Schedule 4 to the 2008 Regulations). This higher figure is extremely important to the dairy sector in order to maintain stocking levels at a commercial level.

4.6 Annex III to the Nitrates Directive requires a Member State which allows a different amount per hectare from the 170 kg limit mentioned above to inform the European Commission, which then examines the justification for it (see paragraph 2, second indent, subparagraph (b), and the final indent in paragraph 2 in Annex III). Once these Regulations are made (and equivalent Regulations in other parts of the UK) a Commission Decision is anticipated reflecting the outcome of the Commission's scrutiny of the UK derogations.

4.7 With this background in mind, interim administrative arrangements were put in place to enable farmers to apply for a derogation ahead of the coming into force of these Regulations. By the time the statutory application period closes, farmers will have been able to apply administratively for a derogation under the interim arrangements for a period of 5 months. The apparently brief application window provided for in the amendment to regulation 13A of the 2008 Regulations (introduced by regulation 7 of these Regulations) should be seen in this light. Grassland farmers to whom this derogation is relevant have been informed via the Defra website, individual correspondence and representative bodies that the requirements attaching to the derogation may be revised if a Commission Decision is issued at the end of the Commission scrutiny process which imposes different requirements, although that is not thought to be likely. (Amendment to Schedule 4 to the 2008 Regulations would become necessary in that case and would apply for the remainder of the year and in subsequent years.)

4.8 The Government also decided to amend regulation 9 of the 2010 Regulations. This change was consulted on as part of the consultation on the action programme revisions, and received wide support. These Regulations make the necessary changes. The amendment will bring forward the point at which farmers must notify the Environment Agency about new slurry stores, or substantially enlarged or reconstructed ones. The requirement is for notice to be given to the Environment Agency fourteen days before work is begun: it applies to construction to be begun on or after 15th June 2013. As these Regulations come into force on 17th May 2013, farmers will have until the beginning of June before they will be required to serve notice, if they are undertaking a construction caught by the new provision. The notice requirement it replaces applied after such works were complete, before the storage system was put to use, whereas this amendment enables the farmer to take account of advice which may be given by the Environment Agency's inspector before works start.

4.9 There are a small number of outstanding appeals and further Regulations will be necessary to finalise any amendments to the new nitrate vulnerable zone boundaries. However, it is important to introduce these Regulations now, rather than wait for all the appeals to be determined, to provide reassurance and clarity as to our intentions primarily to the farming community, and to comply with our EU obligations. Introducing the Regulations at the earliest opportunity will maximise the period available for farmers to adapt to the new provisions and enable farmers to take advantage of new exemptions the Regulations introduce (see paragraph 7.4 below). It will also enable the Government to confirm grassland derogation agreements as soon as possible.

4.10 Welsh Ministers have laid similar Regulations before the National Assembly for Wales. The Scottish Government has laid Regulations to amend its action programme in Scotland, but its review of nitrate vulnerable zone designations will be completed later in 2013. Northern Ireland has designated the whole of the land area in Northern Ireland as a single nitrate vulnerable zone and the action programme applies throughout that part of the United Kingdom. The action programme for Northern Ireland is due to be reviewed later this year and come into force from 1st January 2015.

5. Territorial Extent and Application

5.1 This instrument applies in England only.

6. European Convention on Human Rights

6.1 As this instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

7.1 The Nitrates Directive is an environmental measure that aims to reduce water pollution caused or induced by nitrates from agricultural sources, and to prevent such pollution in the future.

7.2 The review of designations undertaken in England showed an overall improvement in surface water and groundwater quality, but with deterioration in some areas. There were also a number of water bodies continuing to display signs of eutrophication. The overall improvement in water quality was evident in the reduction in the area the Secretary of State proposed to designate as nitrate vulnerable zones, from about 62% of England to approximately 58%. The Regulations will therefore make a net reduction of 4% nitrate vulnerable zone coverage of England from the previous designation. Farms newly in the nitrate vulnerable zones will be required to comply with most measures from 1st January 2014, with exceptions set out in Part 2 of new Schedule A1 which these Regulations insert into the 2008 Regulations. Notably, requirements for closed periods apply from 2015 to give farmers who do not already have them time to build or otherwise acquire the requisite storage facilities. This recognises the capital investment such facilities can entail.

7.3 The Farming Task Force made a number of recommendations for deregulatory action that are included as part of the Government's better regulation approach and are incorporated in the revised action programme. Some of the Task Force recommendations required further research and discussion, and these aspects are being taken forward jointly with industry and interested parties.

7.4 The key changes brought in by these Regulations include the introduction of greater flexibility for some specialist farmers and a reduction of red tape for low intensity farmers. In brief, the changes:

- Allow greater quantities of nitrogen to be applied to grass grown for chlorophyll production and high protein feed for livestock (a sector worth approximately £8-9 m annually);
- Allow greater quantities of compost to be applied to fruit orchards which will boost both fruit quantity and quality, and on a smaller scale, allow increased application of compost more generally;
- Make specific exemptions for crops grown in greenhouses;
- Allow farmers who use modern accurate equipment to spread slurry to operate a little closer to watercourses;
- In line with the recommendations made by the Farming Task Force, reduce the paperwork for low intensity farmers. The Regulations set conditions for a holding to benefit for this exemption: essentially, they are 80% or more grassland, where organic manure is applied at less than 100 kg Nitrogen per hectare averaged across the farm. For such holdings, detailed field level records of fertiliser applications will not be required, and the spreading limit for any given hectare are disapplied.

7.5 The action programme also includes a range of modest, evidence-based changes to reduce nitrate pollution. The most significant of these is that the extension of the closed period on medium and heavy land by two weeks to the end of January. Farmers cannot spread on the land materials containing a high proportion of readily available nitrogen, such as slurry, during the closed period. There are differing closed periods dependent on the soil types and whether the land is grassland or arable. The closed periods are necessary to prevent the risk of nitrate pollution; this two-week extension will reduce the risk of nitrate leaching on these heavier soils. The additional two-week period will reduce the available storage buffer capacity for slurry but will still leave grassland farms with 6 weeks of spare capacity in an average year.

7.6 The Regulations also prescribe higher figures for nitrogen efficiency for manures, giving a higher available nitrogen value in relation to cattle and pig slurry, as set out in the table in regulation 17 of the 2008 Regulations. The new provisions will encourage efficient use of manure and this can reduce farmers' costs, as they should then apply less additional synthetic fertiliser. The amendments to regulation 17 also ensure the proper consideration of the nutrient content of all organic materials applied to the farmer's land. These changes will improve nutrient management on farms and reduce the potential for pollution.

7.7 The 2008 Regulations already limit the total amount of nitrogen that may be applied to certain crops (listed in regulation 16 of the 2008 Regulations). These Regulations add a number of horticultural crops to that list. The Government did not include this extension of the range of crops when it consulted in December 2011 to March 2012. However, it became clear during the further development of the Regulations that there were a number of omissions from the existing list of crops. The amendment to this regulation addresses that shortcoming and will ensure proper controls on the vast majority of crops grown on a holding. Based on

FACTS²-qualified advice, the Government understands these limits reflect current good practice and are likely to place very little if any constraint on farmers growing horticultural crops who already follow good nutrient management practice, and that the impacts of this change will therefore serve to prevent excessive use of nitrate.

7.8 The Government Response to the consultation held December 2011 to March 2012 proposed that there would be no changes to the storage of farmyard manure in field heaps, but recognised that further guidance would be helpful. Since then the Government has concluded that in order to achieve the environmental objectives of the Nitrates Directive the clarification intended for the guidance should be given statutory force. These Regulations therefore prohibit farmers from building a temporary manure heap on steeply sloping ground near a watercourse, and require them to ensure that heaps are as compact as reasonably possible to minimise the volume of rainwater they absorb.

7.9 These changes are expected to bring environmental benefits. The most significant benefit will come from extending the closed period. This change will reduce nitrate leaching to water by around 200 tonnes per annum, and greenhouse gas emissions of around 2,500 tonnes per annum.

7.10 These Regulations make minor changes to the notification procedure in respect of the storage of slurry on farms. Farmers proposing to build or improve their storage facility for slurry, silage or fuel oil will be required to notify the Environment Agency 14 days before construction work is begun, replacing the previous requirement for notification prior to the storage facility's actual use.

7.11 The Regulations amend the Nitrate Pollution Preventions Regulations 2008, as amended by the Nitrate Pollution Prevention (Amendment) Regulations 2009, the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) (Amendment) Regulations 2010, and the Nitrate Pollution Prevention (Amendment) Regulations 2012. The Department plans to consolidate the legislation when the action programme measures are further revised.

8. Consultation outcome

8.1 In December 2011, the Government consulted on proposals to amend its implementation of the Nitrates Directive. The consultation closed on 16 March 2012. The consultation focused on the proposed changes to the farm practice requirements (the action programme), and whether we should continue designating discrete nitrate vulnerable zones or to designate the whole of England.

8.2 There were fifty responses from a wide variety of farming business, environmental and regulatory interests. The Government published a summary analysis of the issues raised by respondents on its website and sent it to organisations with an interest on 28th August 2012.

² "FACTS" are qualified persons who have undertaken the Fertiliser Advisers Certification and Training Scheme

Since the consultation closed, there has been ongoing dialogue with representatives of both environmental and farming interests.

8.3 The response from the farming sector focused on the practical implications of some of the measures. Farming groups have welcomed the overall reduction in the extent of nitrate vulnerable zones and 78% of respondents were in favour of continuing the current policy of individual designation of nitrate vulnerable zones. Farming groups also welcomed the introduction of extra flexibilities and reduced red tape burdens. Farming groups argued against the extension of the closed period but the scientific evidence for the extension is strong.

8.4 Environmental organisations expressed support for measures that would reduce the use of manures and fertilisers and therefore reduce the risk of water pollution. This was also broadly consistent with the views of water companies.

8.5 Defra sought a screening opinion as to the need for a Strategic Environmental Assessment for the changes proposed by these Regulations. The Environment Agency, English Heritage and Natural England have all confirmed that no such assessment was needed.

9. Guidance

9.1 The Government is updating the existing guidance material to include the changes introduced by the Regulations. We are taking the opportunity to address criticism from farmers on the readability and content of the existing guidance material. The new guidance will be available in May 2013 for owners and occupiers of holdings, which are in areas of land in England designated as nitrate vulnerable zones, to enable them to follow and apply the provisions in these Regulations.

10. Impact

10.1 An Impact Assessment for these Regulations is included in this Explanatory Memorandum.

10.2 The review of the nitrate vulnerable zone designation results in approximately 10,000 farmers no longer being required to comply with the 2008 Regulations. The benefit to the farmers who are no longer within a nitrate vulnerable zone designation is a total net present value of £1.6 million. There are approximately 2,500 new farmers included by the new designations. We estimate that the benefit to the environment from the new nitrate vulnerable zone farms adhering to the action programme will have a net present value of £0.7 million.

10.3 The package of measures in these Regulations focuses on simplifying the requirements on farmers, updates existing aspects based on new scientific evidence and maintains the current targeted approach to designating nitrate vulnerable zones.

10.4 The extension of the closed period will not directly impose new burdens on farmers already in nitrate vulnerable zones. However, some of the 120 newly designated commercial

dairy farmers may have to increase their slurry storage capacity depending on their existing storage capacity. We expect a significant proportion will already comply with the storage capacity rules and therefore not face any additional capital outlay. The potential cost of additional slurry storage capacity for all those newly designated farms without adequate storage has been included in the Impact Assessment at a total present value of £0.6 million.

10.5 The Government wishes to continue the grassland derogation to support the dairy industry through the current dairy crisis. There are additional environmental costs arising from granting the derogation through higher greenhouse gas losses associated with increased manure production and use. However, the Government considers the alternative to a derogation would be fewer dairy farmers and the ploughing up of existing grassland. This would have significant environmental consequences. A renewed grassland derogation, which allows the application of a higher quantity of livestock manure per year on grassland farms, is included in the Impact Assessment accompanying this Explanatory Memorandum. The derogation enables farmers to maintain a higher number of cows per hectare and has an estimated net present value of $\pounds 3.7$ million positive benefit to the farming community, almost entirely within the dairy sector.

10.6 There are two changes to the action programme which were not consulted on, and which were not included in the policy announced by the Government in August 2012. The Government has since concluded these two changes should be introduced in order to ensure the action programme in England is sufficiently rigorous in seeking to achieve the environmental objectives of the Nitrates Directive. The additional requirements on field heaps (see paragraph 7.8) and the maximum nitrogen provision for crops where we do not already have a maximum figure (see paragraph 7.7) are not included in the attached Impact Assessment. However, farm economists' advice is that these measures will have zero or negligible costs. We therefore do not plan to update the attached Impact Assessment.

10.7 The designation of the nitrate vulnerable zones and the amendment of the action programme established in these Regulations are sufficient to fulfil the environmental objectives of the Nitrates Directive while as far as possible supporting a sustainable farming industry.

11. Regulating small business

11.1 The Regulations apply to small businesses. The businesses affected are farming businesses, and the great majority of these are defined as small. Most farmers affected by these Regulations are already within nitrate vulnerable zones.

11.2 The impact on small businesses has been minimised. The Regulations introduce an exemption from some aspects of record keeping for certain low risk farming activities. The administrative cost savings introduced constitute a modest net annual benefit to business of £0.03m. Industry feedback and research have enabled the Government to amend the Regulations to the benefit of some fruit growers and specialist grass growers. Farmers

growing crops in greenhouses will now be explicitly exempt. The Regulations have also introduced additional flexibility for farmers using particular types of machinery.

11.3 Farmers who are in newly designated nitrate vulnerable zones will have a transition period until 2015 in respect of closed period and related requirements, and until for 1st January 2014 for most other requirements, to give them time to adapt to key elements of these Regulations. For those farmers already in a nitrate vulnerable zone, there will be a transition until 1 January 2014 for the key change which extends the total nitrogen spreading limits to non-livestock manure, and extends the range of crops subject to those limits. We have introduced at the earliest opportunity the changes to measures that provide farmers with some flexibility and continue to protect the environment.

12. Monitoring & review

12.1 The Nitrates Directive requires Member States to carry out four-yearly reviews of designations and the effectiveness of the action programme measures. The next such review will be undertaken in 2015/16. A general regulatory review of the need for and effectiveness of the Regulations is due in 2017.

13. Contact

13.1 Alex Bowness at the Department for Environment, Food & Rural Affairs (tel: 020 7238 6710 or email: alex.bowness@defra.gsi.gov.uk) can answer any queries regarding this instrument.