



Phosphorus build-up training programme (article 16(5)(d) of S.I. no. 605/2017)

Farmer learning objectives leading to best practice adoption

- Knowledge of measures for the protection of water quality under Nitrates Directive –NAP.
- Best practice in nutrient management planning and fertiliser application.
- Understanding importance and achievement of P build up in a sustainable manner.
- Maximising the efficiency and utilisation of organic manures.
- Identifying and ensuring protection of critical source areas (i.e. areas with higher nutrient loss risk).

Sources of information and course training materials

- Course P build-up training material <https://www.teagasc.ie/crops/soil--soil-fertility/soil-p-build-up-training-material/>
- Nitrates Directive –NAP Statutory Instrument (S.I.) 605 of 201
- Health & Safety <https://www.teagasc.ie/rural-economy/farm-management/farm-health--safety/>
- EPA Water and Communities areas for Action <http://watersandcommunities.ie/areas-for-action/>
- EPA catchments - water quality <https://www.catchments.ie/>
- Teagasc Soil and Soil Fertility website <https://www.teagasc.ie/crops/soil--soil-fertility/>
- Teagasc Green Book <https://www.teagasc.ie/media/website/publications/2016/soil-fertility-green.pdf>
- NMP On-line <https://www.teagasc.ie/environment/soil/nmp/>

Agenda – topics to be covered in the training programme provided to farmers.

Topic (Session 1)	Time - Minutes
Introduction and background the Soil P Buildup	10
Update on new water protection measures in SI 605/2017 - Water quality trends in Ireland and locally - Prevention of runoff from farm roads - Set back of water troughs from watercourses - Fencing watercourses - Prevention of run off from poaching - Soil sampling - Phosphorus management and P build up - Soil organic matter testing - safeguarding 'peaty' soils	40
Understanding soil analysis results and understanding the NMP/Fertiliser plan	30
Addressing soil pH & liming requirements	20
Balancing Nitrogen, Phosphorus and Potash requirements	25
Selecting the correct fertiliser, fertilising programme and Lime plan for next 4 years	30
Review of fertiliser plans for best environmental outcomes	25
Total 1st session (indoors)	180 minutes

Topic (Session 2)	Time - Minutes
Health & Safety on the farm <ul style="list-style-type: none"> • Safety as regards manure storage facilities • Safety with machinery • Safety with animals 	30 (outdoors preferably)
Effective Nutrient Management Planning for optimum environmental outcomes Identifying and protecting critical source areas and areas with higher risk of nutrient runoff on the farm. Phosphorus loss risk & mitigation <ul style="list-style-type: none"> • Protecting critical source areas • Management on heavy soils • Sloping land and water logged soil • Assessment of soil type on farm (high OM soils) 	45 (outdoors preferably)
Organic manure management – maximising use of nutrients in manures <ul style="list-style-type: none"> • Timing, rate and place of application • Low Emission Spreading - minimising Ammonia emissions & improving utilisation • Critical source area management • Buffer Zones and set back distances 	30 (outdoors preferably)
Q & A	15
Total 2nd session (outdoors preferably)	120 minutes
Grand Total Course contact time (minutes)	300 Minutes

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