

## SUSTAINABLE MANAGEMENT PROGRAMME FOR NITROGEN IN AGRICULTURE

AGRI 9

The protection of water against pollution caused by nitrate from agricultural sources is governed by Directive 91/676/EEC. This is implemented in Wallonia through the Sustainable Management Programme for Nitrogen in Agriculture (Programme de gestion durable de l'azote en agriculture - PGDA), which entered into force at the end of 2002 and whose 3<sup>rd</sup> action programme has been in force since 15/06/2014 (PGDA III).

## The primary measures of the programme

The measures of the PGDA III<sup>1</sup> include:

- ensuring equilibrium of the organic nitrogen balance at farm level through the establishment of spreading standards and the calculation of a soil binding rate (SB) whose value cannot exceed 1<sup>2</sup>;
- laying down rules for the spreading of organic and mineral nitrogen fertilisers;
- implementing measures to prevent nitrogen transfers to water (soil cover between crops, nitrate trapping intermediate crops etc.);
- establishing conditions to be respected as regards the destruction of permanent grasslands;
- establishing spreading contracts;
- designating vulnerable zones (VZ) whose soils are likely to supply nitrogen to already impacted groundwater and surface water, where special measures are required: calculation of a SB VA on the basis of a spreading standard set for VA<sup>2</sup>, control of potentially leachable nitrogen (PLN), rules for the cover of bare soils or restrictions on the addition of mineral nitrogen to sloping soil;
- creating storage infrastructures adapted to the different types of livestock manure;
- organising controls and setting up a framework structure (PROTECTeau)<sup>3</sup>.

## Vulnerable zones and potentially leachable nitrogen

The designation of VA is based on the presence of nitrate at too high concentrations (> 50 mg/l) in surface water<sup>4</sup> and groundwater<sup>5</sup> and/or on the risk that the situation will deteriorate if adequate measures are not taken. Since 2013, VAs have included the northern

part of the Sambre-et-Meuse line, the Pays de Herve, South Namur and a large part of the Condroz, i.e. 60% of the utilised agricultural area<sup>6</sup>. Within these areas, PLN measurements (kg of nitrogen-NO<sub>3</sub>/ha present in the soil at the end of the agricultural season, between 15/10 and 30/11) are carried out each year in 5% of the randomly selected farms. These values are compared with values based on observations for 8 crop classes in 41 benchmark farms. In 2015, 689 farms located in VA were inspected, 561 were found to be in compliance, i.e. 81.4% of farms (versus 84.4% in 2014). The compliance rate was 98.7% for the plots under grassland.

## Compliance of storage infrastructures

By 01/01/2016, Walloon farmers were required to submit an application to the DG03 for an attestation of compliance of the storage facilities for livestock manure (*Attestation de la conformité des infrastructures de stockage des effluents d'élevage - ACISEE*). This is renewable every 5 years. The infrastructures for which it has been issued are considered to be compliant with the standards, except in the case of controls for an infringement. The data relating to these controls are stored in a database. At present, they are not sufficient to provide a representative picture of the situation.

## Regular revision

The legislation provides for a review of the PGDA every 4 years to improve its effectiveness. The next revision is expected to take place in 2018.

<sup>[1]</sup> Walloon Government Decree of 13/06/2014 | <sup>[2]</sup> → AGRI 8 | <sup>[3]</sup> Has replaced Nitrawal since 15/12/2016 | <sup>[4]</sup> → WATER 6 | <sup>[5]</sup> → WATER 13 | <sup>[6]</sup> → Map 50

Fig. AGRI 9-1 Conformity of potentially leachable nitrogen (PLN) measurements in agricultural soils in vulnerable areas in Wallonia

