

**State Laboratory**  
Overview of Sections

**1. CORPORATE SERVICES**

Section Manager: Ms. Nuala Talty, Assistant Principal

The principal functions of the section relate to:

- (a) Human resource policy development and implementation
- (b) Provision of financial management information to the Management Board
- (c) Clerical back-up to analytical staff
- (d) Conduct of industrial relations
- (e) Multi-annual budgeting
- (f) Preparation of budget estimates
- (g) Monthly returns of expenditure to the Department of Public Expenditure & Reform
- (h) Payment of accounts
- (i) Administration of the personnel code
- (j) Staff information
- (k) Building maintenance and accommodation planning

**2. ANIMAL FEEDINGSTUFFS**

Section Manager: Dr Helen Cantwell, Senior Chemist

The role of the section is to provide an analytical and advisory service to the Department of Agriculture, Food and the Marine (DAFM). This service includes carrying out analysis on compound feeds, feed materials, mineral mixes and premixtures in order to ensure compliance with national and EU legislation. Analytes determined include macro-nutrients (protein, fat, starch), micro-nutrients (trace elements), fibre, moisture, undesirable substances (toxic elements), zootechnical additives and veterinary medicines.

The section also analyses samples of fertilisers and limestones for DAFM.

The section is a designated official control laboratory for animal feedingstuffs (designation from DAFM) and hosts the National Reference Laboratory (NRL) functions for additives and heavy metals in feed (as detailed in the following table).

<b>NRL Category</b>	<b>Matrix/Parameter</b>	<b>Sub-Parameter</b>	<b>EU Reference Laboratory</b>
Animal Nutrition	Additives for use in animal nutrition	Not applicable	Joint Research Centre. European Commission. Institute for Reference Materials and Measurements, Geel, Belgium
Chemical Safety	Heavy Metals (in Feed)	Not applicable	Joint Research Centre. European Commission. Institute for Reference Materials and Measurements, Geel, Belgium

### 3. CONTAMINANTS

Section Manager: Dr Julie Tierney, Senior Chemist

The role of the section is to provide an analytical and advisory service to DAFM and other bodies in relation to chemical contaminants in food and feed, to ensure compliance with National and EU legislation. The main services provided are as follows:

- Analysis of Dioxins/PCBs in samples of food and animal feed under the National Residue Monitoring Plan and the Feedingstuffs Inspection Programme for Ireland.
- Analysis for mycotoxins and plant toxins in feed and food of animal origin under the Feedingstuffs Inspection Programme for Ireland and the National Residue Monitoring Plan.
- Analysis of leafy vegetables for nitrate content.

The section hosts the National Reference Laboratory (NRL) functions for Mycotoxins in Feed and in Food of Animal Origin and for Dioxins and PCBs in feed and food (as detailed in the following table).

<b>NRL Category</b>	<b>Matrix/Parameter</b>	<b>Sub-Parameter</b>	<b>EU Reference Laboratory</b>
Chemical Safety	Mycotoxins (in Feed)	Not applicable	Joint Research Centre. European Commission, Institute for Reference Materials and Measurements, Geel, Belgium
Chemical Safety	Residues Environmental	Group B (3) (d): Mycotoxins	Rijksinstituut voor Volksgezondheid en Milieu (RIVM), 3720 BA Bilthoven, The Netherlands
Chemical Safety	Dioxins and PCBs	Not applicable	Chemisches und Veterinäruntersuchungsamt (CVUA), Postfach 100462, D-79123 Freiburg, Germany

#### 4. VETERINARY TOXICOLOGY

Section Manager: Dr Edward Malone, Senior Chemist

Samples of food of animal origin and fluids and tissue from food-producing animals are analysed to monitor compliance with EU veterinary residues legislation, primarily for hormones, non-steroidal anti-inflammatory drugs (NSAIDs), nitroimidazoles, corticosteroids and sedatives. The section hosts the National Reference Laboratory (NRL) function for these substances and, in addition to routine testing, it has an oversight role for official control laboratories carrying out screening analysis for these analytes. It carries out analytical and method development work in order to fulfill the requirements of a NRL and maintain this status.

The section hosts the National Reference Laboratory (NRL) function for Residues of Veterinary Medicines (as detailed in the following table).

NRL Category	Matrix/Parameter	Sub-Parameter	EU Reference Laboratory
Chemical Safety	Residues of Veterinary Medicines	Group A (1): Stilbenes	RIKILT Wageningen UR, P.O. Box 230, 6700 AE Wageningen, Nederland
Chemical Safety	Residues of Veterinary Medicines	Group A (3): Steroids	RIKILT Wageningen UR, P.O. Box 230, 6700 AE Wageningen, Nederland
Chemical Safety	Residues of Veterinary Medicines	Group A (4): Resorcylic acid lactones including zeranol	RIKILT Wageningen UR, P.O. Box 230, 6700 AE Wageningen, Nederland
Chemical Safety	Residues of Veterinary Medicines	Group A (6) Nitroimidazoles	Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (BVL), D-12277 Berlin, Germany
Chemical Safety	Residues of Veterinary Medicines	Group A (6) Chlorpromazine	RIKILT Wageningen UR P.O. Box 230, 6700 AE Wageningen, Nederland
Chemical Safety	Residues of Veterinary Medicines	Group B (2) (b): Nitroimidazoles only	Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (BVL), D-12277 Berlin, Germany
Chemical Safety	Residues of Veterinary Medicines	Group B (2) (d): Sedatives	RIKILT Wageningen UR, P.O. Box 230, 6700 AE Wageningen, Nederland
Chemical Safety	Residues of Veterinary Medicines	Group B (2) (e): Non-steroidal anti-inflammatory drugs (NSAIDs)	Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (BVL), D-12277 Berlin, Germany
Chemical Safety	Residues of Veterinary Medicines	Group B (2) (f): corticosteroids only	RIKILT Wageningen UR, P.O. Box 230, 6700 AE Wageningen, Nederland

#### 5. HUMAN TOXICOLOGY

Section Manager: Dr Yvonne Kavanagh, Senior Chemist

The work of the Human Toxicology Section is carried out for the following purposes:

Analytical support for Coroners' and State Pathologist investigations: Post-mortem samples from autopsies are analysed to assist the Coroner / State Pathologist to establish the cause or circumstances of death in cases of sudden death. The results of such analyses can indicate if the deceased was taking medication at the time of death, whether a drug overdose was taken or if the deceased was under the influence of alcohol or drugs in cases of fatal road traffic accidents or suicides.

Criminal investigations: Biological samples submitted for analysis in criminal cases (such as murders or cases of alleged rape) are analysed for drugs or alcohol to elucidate the circumstances surrounding each case.

Analyses: The main analyses carried out are for ethanol (alcohol), carbon monoxide and drug screening, quantitation and confirmation (covering both prescribed drugs and drugs of abuse). Samples are also analysed for volatile compounds in cases of suspected volatile inhalation or inhalation of gases.

## 6. CUSTOMS and EXCISE

Section Manager: Ms Eileen McCarron, Senior Chemist

The section provides an analytical and advisory service mainly to Revenue and to a lesser extent to other departments (e.g. Department of Jobs, Enterprise and Innovation (DJEI), Department of Environment and Local Government, cultural heritage organisations)

The section advises on the tariff and/or excise classification of goods for the purpose of revenue protection. Imported and exported goods are classified according to EU regulations on the tariff and statistical nomenclature and on the Common Customs Tariff. When the importation/exportation is within the EU, the classification may be either for statistical purposes or for the implementation of other regulations. When an importation is from a country outside the EU, duties / levies / quotas relevant to the product depend on the tariff classification.

In relation to Excise, the primary role of the section is the analysis of hydrocarbon oils and alcohol containing products in order to determine their liability to excise duty, either on a monitoring basis or where there is a suspicion of fraud.

The principal functions of the section relate to:

- chemical analysis of
  - a wide range of samples in order to determine or confirm tariff classification, excise classification, or product composition,
  - alcoholic beverages and other alcohol-containing products to determine their alcohol content and confirm identity
  - hydrocarbon oils to test for the presence of prescribed markers which would indicate the illegal use of rebated oils or to monitor the marking of rebated oils.
- giving advice to Revenue on tariff or excise classification or on aspects of legislation which have analytical implications
- attendance on behalf of Revenue at EU meetings and meetings of World Customs Organisation Scientific Subcommittee
- provision of support to DJEI in relation to applications for duty suspensions at the EU Economic Tariff Questions Group (ETQG) (Chemical Sector)
- attending meetings of EU committees concerned with developing methods of analysis for various products
- attendance at meetings relating to co-operation between EU customs laboratories (Customs Laboratories European Network).

## **7. HEALTH AND INFORMATION TECHNOLOGY**

Section Manager: Ms Joanne O'Shea, Senior Chemist

The Health section provides an analytical and advisory service to the Department of Agriculture, Food and the Marine (DAFM) and the Health Products Regulatory Authority (HPRA).

The section carries out analyses for the DAFM Investigations Division which is responsible for controlling the illegal possession, sale or use of veterinary medicinal products. Samples submitted are analysed for a wide range of veterinary pharmaceutical substances.

The section assists the HPRA to control the use of unlicensed human medicines by analysing seized pharmaceutical products for the presence of pharmaceutically active compounds. The section also tests a small number of samples from other sources including Customs & Excise officers and the Pharmaceutical Society of Ireland.

The role of the IT Section is to support the work of the laboratory by providing a stable and reliable IT infrastructure and in particular by supporting and developing the Laboratory Information Management System (LIMS).

## **8. QUALITY ASSURANCE UNIT**

Section Manager: Dr Gráinne Carroll, Senior Chemist

The Quality Assurance Unit is responsible for the design and implementation of the Quality System within the laboratory, for monitoring compliance with the system by organising and implementing a program of internal audits, for issuing and maintaining quality documentation and for liaising with INAB. The section is also responsible for the Laboratory's metrology role.