

National Pesticides and Drinking Water Action Group

Webex meeting – 27 May 2021

Attendees

The following organisations were represented at the meeting:

Department of Agriculture, Food and the Marine (Chair)	[DAFM]
Agricultural Consultants Association	[ACA]
Animal and Plant Health Association	[APHA]
Confederation of Golf in Ireland	[CGI]
Cork Co. Co.	[CCC]
Environmental Protection Agency	[EPA]
Ervia	[Ervia]
Federation of Agrochemical Retail Merchants	[FARM]
Irish Creamery Milk Suppliers Association	[ICMSA]
Irish Farmers Association	[IFA]
Irish Water	[IW]
Local Authority Waters Programme	[LAWPRO]
National Federation of Group Water Schemes	[NFGWS]
Teagasc/ASSAP	[Teagasc/ASSAP]
Wicklow Co. Co.	[WCC]

1. Welcome

- Chair welcomed attendees to the Webex meeting.

2. Minutes of previous meeting

- The minutes of the previous meeting (22-02-2021) were noted.

3. EPA update on drinking water exceedances and enforcement

- 9 drinking water exceedances (DWE) in 8 supplies were reported for the year to date (26/05/2021). *MCPA* accounted for the bulk of these (3) followed by *2,4-D* (2) and *glyphosate*, *fluoroxypyr*, *bentazone* and *clopyralid* (one each). This compared with 16 DWE in 10 supplies for the same period in 2020.
- The 8 supplies reporting exceedances were identified as Newport (MO), Newcastle West (LK), Buncrana (DL), Fanad East (DL), Ferns Regional (WX), LERWSS (MN), South Regional (WX) and Upperchurch (TP).
- Some failures in areas with no previous history of exceedances were noted – Buncrana (DL), Ferns Regional (WX) and Upperchurch (TP).
- Open investigation files currently number 41 (*cf* 34 at the same stage in 2020). They comprise 35 supplies on the Watch List and six supplies on the Action List (Longford Central (Lough Forbes), Newcastlewest, Co. Limerick (River Deel), Belturbet, Co. Cavan (River Erne), Clonroche, Co. Wexford (groundwater), Newport, Co. Mayo (Newport River) and Foynes/Shannon Estuary, Co. Limerick (River Deel)).
- An exceedance of *glyphosate* in the Upperchurch catchment in Tipperary was noted. This detection (6 April, 0.274 ppb) was earlier in the year than any of the previous 16 exceedances recorded over the period 2018-2020, and except for Villierstown (WD) in Dec 2018 (0.38 ppb), was at a greater magnitude than the previous recorded detections.

4. Irish Water update on drinking water exceedances

- IW presented their national quarterly update for Q1 2021.
- With respect to the current Action List, non-compliances in 2021 were noted in respect of Newcastle West PWS (one failing month) and Newport PWS (one failing month).
- In addition to the Action List supplies, IW requested the assistance of the NPDWAG in dealing with 26 supplies that had either two failing months or one failing month in the last quarter. These supplies comprise Hacketstown (Carlow CC), Arvagh PWS (Cavan CC), Shannon/Sixmilebridge (Clare CC), Bantry Cahernacrin (Cork CC), Fanad East (Shannagh) (Donegal CC), Ballymagroarty (Donegal CC), Donegal/River Eske (Donegal CC), Bunrana (Donegal CC), Tullycross (Galway CC), Ballinasloe (Galway CC), Listowel (Kerry CC), Longford Central (Longford CC), Granard (Longford CC), Cavanhill (Louth CC), South Louth & East Meath (Louth CC), Newcastle West (Limerick CC), Louisburg PWS (Mayo CC), Newport (Mayo CC), Glaslough (Monaghan CC), Emyvale (Monaghan CC), LERWSS (Monaghan CC), Dundrum Regional (Tipperary CC), Upperchurch (Tipperary CC), Wexford Town (Wexford CC), Ferns Regional (Wexford CC) and South Regional (Wexford CC).
- Data on pesticide exceedances (by parameter) for the period March to May 2020 and 2021 show that *MCPA* exceedances decreased from 6 in 2020 to 4 in 2021, and that *glyphosate* detections over the same period remained static at 1 in each year.
- Regarding the 41 investigation files currently open (covering six Action List supplies and 35 Watch List supplies), three new supplies have been added to the Watch List during 2021, comprising LERWSS (Monaghan CC), Upperchurch (Tipperary CC) and Ferns Regional (Wexford CC). There have been four exceedances to date in 2021 across the newly added supplies, comprising *MCPA* (1 exceedance), *clopyralid* (1 exceedance), *fluroxypyr* (1 exceedance) and *glyphosate* (1 exceedance).
- Detection of *bentazone* residues in the Fanad East (Shannagh) catchment in April (0.46 ppb) generated some discussion. *Bentazone* is the active ingredient in Basagran SG, a post emergence herbicide for use in peas, beans, and potatoes. It was considered that this catchment would be unsuitable for growing peas and beans. Commercial potato farmers are no longer using Basagran but it was speculated that an amount of residual product might have been used on a small garden plot. DAFM agreed to follow up locally. IW are to carry out repeat monitoring in the area.

Irish Water updates on Catchment Focus Groups and other projects

- Updates on ongoing collaboration on three Catchment Focus Groups (CFG) – Lough Forbes (Longford Central), Newport, and Cavan (Belturbet PWS) were provided, as were details on the recently revived CFG incorporating the Rivers Feale and Deel (Newcastle West PWS, Foynes/Shannon Estuary, Listowel), and the newly established CFG – Tullycross. Catchment maps and data are now available for download.
- Activities were progressed in all CFG areas, including stakeholder meetings and various key actions, such as monitoring and engagement activities.
- Feedback from stakeholders was presented on the draft IW Interim Pesticide Strategy which seeks to provide a “*risk management framework to objectively understand and manage pesticide risk on a prioritised basis within drinking water catchments for public water supplies*”. The strategy was positively received, being viewed as collaboration between all relevant stakeholders sharing a common goal of minimising the risk of pesticide contamination of drinking water sources. Stakeholders had requested additional information on the following points:

- progress to date in reducing the risk of pesticides
- catchments with persistent exceedances of pesticides
- National Water Resources Plan and the rationalisation of supplies
- DWSP methodology for characterising the risk of pesticides to drinking water
- additional focus on amateur users of PPPs
- how the effectiveness of the strategy is to be measured, and the requisite timelines
- alternatives to catchment management, e.g. treatment options.
- Stakeholders also sought clarification on:
 - the roles and responsibilities of external stakeholders
 - confirmation that the strategy does not cover enforcement activities (which reside with DAFM), and
 - the feasibility of alternative options would be considered on a case-by-case basis.
- Data was also presented showing the percentage of pesticide exceedances over the period 2017 to 2020. Over the period 2016 and 2017 the average percentage of analysed samples exceeding 0.1 microgram/L was 1.56% compared with 0.87% for the period 2018 to 2020. This was seen to reflect progress being made by the work of the NPDWAG.
- Progress in establishing a Pilot Drinking Water Source Protection Project was provided. Funding was secured from 2021, and work is currently ongoing in evaluating tenders to carry out the work. Design and planning will commence to refine sub-catchment selection, and progress further stakeholder engagement. It is proposed to establish a project working and advisory group, and undertake baseline monitoring. Delivery on the ground is anticipated 2022/2023.

5. APHA catchment monitoring results

- APHA summarised the winter monitoring results for L. Forbes during 2019 and 2020. In contrast with 2019 which was relatively compliant with regard to MCPA exceedances (4), 17 were detected over the same period in 2020. In 2019 the bulk of the detections occurred in week 42 but in 2020 the detections were spread fairly equally between weeks 42 and 11, with general compliance between these markers. The general feeling was L. Forbes is not improving with respect to MCPA, and that contemporaneous use is the most likely explanation for the detections in both years as opposed to historic legacy issues.
- The APHA monitoring plan for 2021/2022 was outlined, indicating a similar sampling timetable to that for 2019 and 2020. In terms of the catchments to be monitored, Belturbet, Lough Forbes and the River Deel were maintained, with 15, 18 and 11 sampling locations/points respectively. Sampling locations on the River Feale were reduced to 2/3 locations, whilst the Newport Catchment was added with 8 sampling points.
- In terms of results for 2021 to date;
 - Deel catchment (DC) – weeks 14, 15 & 16. Fully compliant
 - Newport catchment (NC) – weeks 14 & 15. Fully compliant
 - Feale catchment (FC) – weeks 14, 15, 16 & 17. Two non-compliances were detected for this catchment, both on the River Feale upstream of the WTP in weeks 51 and 17.
 - L. Forbes catchment (LFC) – weeks 14, 15, 16 & 17. Generally a disappointing picture of MCPA exceedances was presented for the year to-date, with evidence of multiple detections across all weeks and sampling locations, and a significant

event on Feeder Stream No. 2 – Kilbarry in mid April. A significant detection of 2,4-D was also recorded on the Black River at Breannskullew (mid April). The magnitude of these exceedances suggests point sources – either filling directly from a water source with associated spillage, or product reaching a drain(s) in a farmyard.

- Belturbet catchment (BC) – weeks 14, 15, 16, 17 & 18. MCPA exceedances were detected at several sampling locations across all sampling weeks.
- APHA also indicated participation in the Teagasc Signpost series of webinars on 12 March and their intention to hold a pesticide distributor webinar at some point in 2021. The possibility of holding a TOPPS Academy event will also be considered.
- The attention of the group was also drawn to the indiscriminate use of glyphosate based products by some amateur users for spot spraying, and the sale of professional use products to amateurs by some retailers.

6. NFGWS experience with pesticide awareness-raising initiatives

- Information was provided on a Pilot Ground Water Source Protection programme operating in Roscommon, which involved an integrated science based catchment approach.
- The initiative is based on three pillars – i) building partnerships, ii) creating and communicating a vision, and iii) farmer based actions. Within each of these pillars several principles and actions have been identified. For participating farms within the catchment, bespoke biodiversity plans focusing on source protection were prepared. All ultimately are about trying to get farmers to think differently.
- It was commented that farmers responded better to being asked to do something positive, e.g. keep bees, or improve biodiversity, rather than being told they couldn't carry out a particular action, e.g. spraying, and that by embracing the need to improve biodiversity, it brings about a parallel reduction/elimination in spraying activity, which also benefits water quality.
- The final results of an attitudes and behaviour study into amateur PPP usage were also presented. Table 1 below summarises some of the findings from this survey.

Table 1. Summary findings from an attitudes and behaviour study into **amateur PPP usage**

69% of participants admitted using PPPs in a domestic setting.
96% of participants considered that using PPPs in the garden negatively impacted on water quality and biodiversity.
As a result of various local initiatives; 42% of participants intended to reduce PPP usage going forward 35% of participants intended to stop using PPPs going forward, and 22% indicated they would take greater care when using PPPs in the future.
For individuals who have reduced or stopped using PPPs; 42% identified protecting bees as the highest motivating factor 25% identified protecting a water source as the highest motivating factor, and 25% indicated protecting family and community health as the motivating factor.
For those individuals who indicated that they would continue to use PPPs; 35% identified the need to keep property neat and tidy as a motivating factor 35% considered that there was no other viable option, and 23% indicated that using PPPs was easier than other available alternatives.

- Various outlets and stakeholders were identified in raising awareness, including local marts, radio, schools, social media, local papers and neighbours. A particular initiative of note was the availability of a sprayer tester to go on to participating farms to test sprayers. In total 26 sprayers were tested and fitted with low drift reducing nozzles. 19 new pressure gauges were also fitted.

7. Communications activities

- Ervia summarised coverage of the media campaign launched in March. This included 127 pieces of coverage in 23 counties, with an estimated reach of 5.3m hits covering radio, print and online media outlets. This included 13 radio pieces, 34 online pieces and 36 regional news items.
- Additional planning for 2021 includes paid for promotions in DoneDeal (lasting for one month commencing May 11, targeting the farming audience) and Agriland.
- Cork CC detailed the results of a Spray Safe campaign run on CCC Environment Dept. Facebook page from April 4 to 9. The campaign lasted 5 days with different posts each day. In total the campaign generated 204,675, impressions (the number of times the ads or posts were seen). Two ad strategies were tested – cost per view and cost per engagement. Learnings from the exercise indicate that cost per engagement generated better results and did not negatively impact video views.
- In all communication activities, the intention was to bring the message back to a local level, so that individuals could relate to the problem, e.g. instead of X non-compliances detected in Co. Z, X non-compliances were detected in River Y between April and May.
- DAFM indicated ongoing progress with the SMS initiative, and that herd-owners in two test catchments (Fanad East (DL) and Dundrum (TP)) had been identified, and that the required mobile phone nos. had been generated. The message to issue was still awaiting clearance but DAFM hoped that the SMS would issue shortly. All relevant stakeholders would be informed of the date of issue in advance.

8. Other updates and discussion

- Teagasc indicated the holding of a successful week long ASSAP water quality event at the end of March. A different theme was tackled each day, and included a webinar hosting 90 farmers in the L. Forbes catchment.
- The NFGWS signalled that Source Protection Plans were near fruition and included the use of PPPs, sedimentation issues and other agricultural pressures.