

Person 3

DAERA NIEA – V

[Name Redacted]

[Address Redacted]

DATE OF INCIDENT 18/05/2024

I have read the attached documentation submitted in respect of the above mentioned incident and a summary is file below.

PREVIOUS HISTORY? None

IS THERE CONSENT? N/a

HAS A POLLUTION PREVENTION VISIT BEEN CARRIED OUT AT THIS SITE N/a

This incident is recommended for **PROSECUTION** because of the impact on the waterway.

I can confirm that this recommendation is consistent with the written procedures for field staff.

Person 4

Person 4

Person 3

I am content that this file is progressed to APS.

27.05.24 530

NORTHERN IRELAND ENVIRONMENT AGENCY

Investigation Summary Sheet

Investigating Officer: Person 1 **Grade:**WQI **Incident Ref:**WR3/24/0504

Alleged breach of:Water (Northern Ireland) Order 1999

By: [Name Redacted] **DoB / Company No.:** Redacted

Address: [Address Redacted]

Date of first investigation: 18 /05 /2024 **Time:**0945

Number of alleged offences:1

Date(s) relevant for charges to be brought:18/05/2024

Sample Point E/N(12): [Redacted] **Discharge point E/N(12):** [Redacted]

Waterway affected:Ballyclover Burn **Tributary of:**Six Mile River

Nature of contamination:Cow slurry

Weather conditions at time of investigation:Dry

Entered waterway/underground strata via:Drainage pipe

Incident severity level: Medium **Observed length of impact on waterway:** 850m

Condition of waterway upstream of discharge point:Clean

Sample collected by: Person 1

Date/Time of sampling: 18 /05 /2024 1400

Date/Time to Laboratory: 18 /05 /2024 1550

Delivered by: Person 2 **Received by:**Out of hours delivery

Sample served on (Name/Company): [Name Redacted] **Date/Time of serving:** 18/05/2024 1828

Date of Caution: 00/ 00 /2000 **Date of Interview:** 00/ 00 /2000

Interviewee: [Name Redacted] **Position:** Farmer

Signed: Person 1 **Date:** 26/11/24 **Grade:**WQI

STRUCTURED OUTLINE OF CASE

NOTE: THIS DOCUMENT MAY BE PROVIDED TO DEFENCE

The purpose of this document is to assist the PPS and the defence by summarising the prosecution case and by listing the evidence which is **currently available**.

Department Reference	WR 3/24/0504 PR09/24
Postcode-Location of Inspection	[Address Redacted]

1. DEFENDANT

If multiple defendants, list in terms of role each played in committing the offence eg principal, aider and abettor, assisting offender

Name	Address	DoB	Reported	Previous Offending History (indicate whether or not the defendant has discretions, PND, domestic criminal record, international criminal record)	Particular needs/ vulnerabilities
[Name Redacted]	[Address Redacted]	[Redacted]	Article 7(1)(a) of the Water (Northern Ireland) Order 1999 for Offences on 18/05/2024	None	N/A

2. CASE OUTLINE

This provides the prosecutor with a resume of the case which can be read out in court. Use the names of the witnesses and the defendants throughout. The resume should tell the story of events in chronological order eg

- Date, Time and location of offence
- Background to the offence
- How was the offence committed?
- Injury or loss
- Identification and apprehension of the offender
- Supporting evidence
- State the value of damage property and estimate of repair
- State whether stolen goods were recovered and were fit for re-sale
- Indicate whether this type of offence is prevalent in the specific area or if the offender is prolific as regards this type of offending
- Physical conditions of scene
- Disposition of victim and offender
- Other relevant information including motivation for crime

- ❖ **Date:** 18 May 2024
- ❖ **Charge(s):** Article 7(1)(a) of Water (Northern Ireland) Order 1999
- ❖ **Impact:** Medium severity discharge of cattle slurry to the Ballyclover Burn, a tributary of the Six Mile River. The farm effluent entered the waterway via a drainage pipe. Dead fish were observed for a distance of approximately 6.5km.

- ❖ **Attitude:** [Name Redacted] was co-operative and professional throughout the investigation, [Name Redacted] undertook prompt remedial actions to stop any further discharges to the waterway.
- ❖ **Bad character:** None

EXECUTIVE SUMMARY

On Saturday 18 May 2024 Water Quality Inspectors responded to a report of slurry in the Four Mile Burn at Doagh. Dead fish and invertebrates were observed in the Four Mile Burn and upstream into the Ballyclover Burn. The Inspectors followed the trail of dead fish to a pipe actively discharging a light green coloured liquid. Dead fish were visible up to this discharge pipe and live fish observed upstream. A sample of this discharge was collected. On entering the nearby farm, the Inspectors spoke with [Name Redacted]. An inspection chamber in a field was opened and a flow of slurry was visible in the chamber. A sample of this slurry was taken. A subsequent dye test connected this inspection chamber and the discharge to the river.

[Name Redacted] immediately removed six loads of slurry, deposited in a below ground slurry tank the previous day which he suspected may have been the source and spread it to fields. [Name Redacted] was cautioned and interviewed.

The Inspectors revisited [Name Redacted] on 21 May 2024, when [Name Redacted] gave details of all the remedial works [Name Redacted] planned to undertake. By 24 May 2024 the slurry tank was empty, its contents spread to fields.

[Name Redacted] remained in contact with the Inspectors, keeping them updated on progress of all works he was undertaking, including sending photographs. [Name Redacted] concluded, in a statement under caution, that the slurry had discharged due to a crack in the slurry mixing system. This crack has been sealed and repaired.

A total of 1,109 dead brown trout were counted by Inland Fisheries officers (extrapolated to 1,771 trout due to the count being 24 hours after the fish kill), over a distance of approximately 6.5km downstream of the farm.

The sample of the slurry collected from the inspection chamber in the field was analysed and had a BOD 1,500 milligrams per litre, 200 times greater than a waterway of 'poor to bad' quality status.

Detailed Summary

On Saturday 18 May 2024 Water Quality Inspectors responded to a report of slurry in the Four Mile Burn at Doagh. At the Ballyvoy Bridge dead fish were observed (downstream from this bridge the waterway is known as the Four Mile Burn, upstream as the Ballyclover Burn); see Map [Name Redacted] /2. Dead fish and dead macroinvertebrates were observed in the waterway.

The Inspectors proceeded upstream along the Ballyclover Burn following the trail of dead fish. At 12:10hrs the Inspectors observed a pipe actively discharging a light greenish coloured liquid with the appearance and odour of dilute slurry to the Ballyclover Burn; a light green coloured plume was visible in the waterway for approximately 2-3 metres. Dead fish were visible up to this discharge pipe and live fish were observed upstream from the discharge pipe.

The Inspectors had located the source of the pollutant that caused the fish kill. An Inspector collected sampling equipment to collect a statutory sample of the weak slurry discharging from the

plastic pipe to the Ballyclover Burn. The sample was labelled with the unique reference number WR /24/0504, the rate of discharge was estimated as 50 litres per minute.

Inspectors travelled to [Address Redacted], Doagh where they spoke with the farm owner. The Inspectors and [Name Redacted] entered a field, at the bottom of this field the discharge pipe (from where the statutory sample was collected) was located. Approximately 30 metres from the gate an inspection chamber was located. [Name Redacted] stated this was the same drain that would discharge (to the waterway) at the bottom of the field. Inside the chamber there were 2 pipes, a flow of green coloured agricultural effluent was visible in the chamber (/12). A second sample was taken from this location. The sample was labelled with the unique reference number WR 3/24/0504B. The rate of discharge was estimated as 5 litres per minute.

[Name Redacted] told the Inspectors [Name Redacted] would immediately remove six loads of slurry which had been deposited in the below ground store the previous day and spread it to the fields. While the Inspectors were sealing the samples they observed the farmer operating farm equipment to spread the slurry.

Inspectors added green drain tracing dye to the flow of liquid in the inspection chamber in the field at 15:28 (/16), at 15:30 dye was observed in the Ballyclover Burn (/17).

[Name Redacted] was cautioned and interviewed. [Name Redacted] was offered and accepted one portion of the sample for analysis.

The Inspectors revisited [Name Redacted] on 21 May 2024, farm workers were continuing to remove and spread slurry from the below ground slurry store to nearby fields. [Name Redacted] gave details of all the remedial works he planned to undertake. By 24 May 2024 the slurry tank was empty.

[Name Redacted] remained in contact with the Inspectors, keeping them updated on progress of all works [Name Redacted] was undertaking, including sending photographs. [Name Redacted] concluded the slurry had discharged in the vicinity of the return nozzle (see /26 [before] and /35e [after]).

The numbers of dead fish counted by the Fisheries Officers were passed onto the Deputy Chief Fisheries Officer to calculate the cost for replacement of the fish killed. These calculations are based on the 2021/22 price list for Brown Trout at Movanagher Fish Farm.

Length of Fish	Brown Trout Cost/Age	Actual Count	Count extrapolated for 24 hours post fish kill	Sub total x2 (to account for wild survival rates)
5cm/2 inches	£127 (0+) per 1000	518	996	£126.49
13cm/5 inches	£415 (1+) per 1000	423	595	£246.92
19cm/8 inches	£732 (2+) per 1000	137	147	£107.60
25cm/10 inches	£1,303 (3+) per 1000	31	33	£42.99
				TOTAL £524.00

The total cost for the replacement of the fish killed is £1,048

Summary of Analysis for statutory sample collected on 18/05/2024 at 12:40 WR 3/24/0504

pH 7.7
BOD 231 (more than 30 times greater than a waterway of 'poor to bad' quality status)
SS 59 (50ml/l would be consented by the Department)

Am 26 (more than 23 times greater than that of a waterway if 'poor' quality status)

Summary of Analysis for statutory sample collected on 18/05/2024 at 14:00 WR 3/24/0504B

pH 7.5

BOD 1500 (200 times greater than a waterway of 'poor to bad' quality status)

SS 343 (more than 6 times the limit that would be consented by the Department)

Am 164 (more than 149 times greater than that of a waterway if 'poor' quality status)

In view of the seriousness of these incidents it is recommended that prosecution proceedings are considered in respect of Article 7(1)(a) of the Water (Northern Ireland) Order 1999 incorporating amendments made by the Water and Sewerage Services (Northern Ireland) Order 2006 for the polluting discharges that occurred on 18 May 2024.

3. SUSPECT INTERVIEW - SYNOPSIS

A Synopsis is a brief account of what was said by the defendant in an interview. It should summarise the questions covering the main elements of the offence(s) and the responses given, including 'No Comment' interview.

A Synopsis must include the following:

- Date and Time of interview and Suspect's name
- Admissions, which cover the 'Points to Prove' of the offence, written in direct speech.
- The defendant's version of events. Where this is disputed, specific denials and any explanation for committing the offence(s).
- Anything said by the defendant in relation to aggravating factors: premeditation, admission of prior knowledge of vulnerability of the victim, lack of remorse shown.
- Use the names of the suspects and witnesses throughout (ie do not refer to suspect 1, suspect 2 etc).
- Include suspect's explanations as to how offence occurred, mitigation and remorse.
- Has an alibi been presented? If so, confirm whether verified and whether alibi statements are available.
- Record response to special warning(s).
- Record response to exhibits shown during interview.
- Summarise any pre-prepared statement provided by the suspect. Anything said by the defendant in relation to aggravating factors: premeditation, admission of prior knowledge of vulnerability of the victim, lack of remorse shown.
- Use the names of the suspects and witnesses throughout (ie do not refer to suspect 1, suspect 2 etc).
- Include suspect's explanations as to how offence occurred, mitigation and remorse.
- Has an alibi been presented? If so, confirm whether verified and whether alibi statements are available.
- Record response to special warning(s).
- Record response to exhibits shown during interview.
- Summarise any pre-prepared statement provided by the suspect.

[Name Redacted] was cautioned at 15:47, [Name Redacted] advised [Name Redacted] understood the caution.

[Name Redacted] confirmed [Name Redacted] was the sole owner of the farm.

[Name Redacted] advised that animals on [Name Redacted] farm were still housed, two of the tanks below the cattle were full, three loads from each tank were removed and put into the storage tank. [Name Redacted] was not aware there was an issue from [Name Redacted] premises until NIEA arrived.

It appeared that the leak occurred from the storage tank. Upon identifying this as the problem, [Name Redacted] "proceeded to remove slurry from the tank until the offending leakage stopped."

[Name Redacted] stated that "so far I have taken 4 out and the 5th is in the tanker. I do intend removing more and will provide evidence of the leak being stopped."

[Name Redacted] explained "As soon as the tank is emptied, we will conduct a thorough inspection to establish where the leak came from and it will be repaired."

[Name Redacted] final statement was "it wasn't intentional by all means."

4. WITNESSES

List witness names and a summary of the role/evidence each provides using the following headings and in this order:

- Victim/Injured Party
- Witness
- Police Officer at scene
- Injury/Medical evidence
- Expert evidence – CSI, Forensic, Fingerprint, VIPER, Cell Site, TLU
- Mapping/photography/CCTV officers
- Continuity – exhibits, log keepers, charging officers
- Interviews

Witness Name	Role/Evidence provided
Person 1 Person 2 Person 5 Person 6 Person 7 Person 8	Water Quality Inspector – Lead Investigating Officer Senior Scientific Officer Higher Scientific Officer – Laboratory Analyst Senior Fisheries Officer Fisheries Officer Deputy Chief Fisheries Officer

5. DIGITAL MEDIA – IF N/A TICK HERE ✓

(PHOTOGRAPH / CCTV / VIDEO / MAPPING / 999 CALLS)

- Ensure that one copy of each relevant exhibit is provided to PPS at point of initial share if the evidence is key and confirm that each exhibit can be properly viewed/played.
- List all physical evidence by witness ID mark and ensure that these appear on the NICHE(PSNI Only) case file property tab.

Item Mark	Exhibiting Witness	Description
Person 1/1	Person 1	Sketch map of the Ballyclover Burn and Four Mile Burn
Person 1/2	Person 1	Sketch map of the Ballyclover Burn to Ballyvoy Bridge where it becomes the Four Mile Burn
Person 1/3	Person 1	Orthophotograph of the farm at [Address Redacted], Doagh
Person 1/4	Person 1	Four Mile Burn visually clean and no dead fish observed (18/05/2024)
Person 1/5	Person 1	Dead fish in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024
Person 1/6	Person 1	Dead fish in Ballyclover Burn (immediately upstream of Ballyvoy Bridge) 18/05/2024
Person 1/7	Person 1	Dead macroinvertebrates in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024
Person 1/8	Person 1	Dead fish in Ballyclover Burn 18/05/2024
Person 1/9	Person 1	Dead fish in Ballyclover Burn 18/05/2024
Person 1/10	Person 1	Dead fish in Ballyclover Burn 18/05/2024
Person 1/11	Person 1	Pipe actively discharging weak dilute slurry to the Ballyclover Burn at [Address Redacted] Statutory sample WR 3/24/0504 was collected from this location 18/05/2024
Person 1/12	Person 1	Flow of green coloured agricultural effluent through inspection chamber in Field [Address Redacted] at [Address Redacted]. Statutory sample WR3/24/0504B was collected from this location 18/05/2024
Person 1/13	Person 1	Dried slurry on the slats of the below ground slurry store 18/05/2024
Person 1/14	Person 1	Inspection chamber adjacent to slurry tank 18/05/2024
Person 1/15	Person 1	Inspection chamber adjacent to slurry tank 18/05/2024
Person 1/16	Person 1	Drain tracing dye in inspection chamber in Field [Address Redacted] (18/05/2024)
Person 1/17	Person 1	Drain tracing dye actively discharging to the Ballyclover Burn at IGR [Address Redacted] (18/05/2024)
Person 1/18	Person 1	Transcript of Interview with [Name Redacted], recorded by hand, on 18 May 2024, at [Address Redacted], by Person 1, NIEA Inspection chamber in Field [Address Redacted] (18/05/2024)

Person 1/19	Person 1	Inspection chamber in Field [REDACTED] taken on 21/05/2024
Person 1/20	Person 1	Inspection chamber in Field [REDACTED] taken on 21/05/2024
Person 1/21	Person 1	Level of slurry very near the bottom of the store taken on 11/06/2024
Person 1/22	Person 1	Liquids in bottom of inspection chamber adjacent to meal bin visually clean taken on 11/06/2024
Person 1/23	Person 1	Email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24a	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24b	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24c	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24d	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24e	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24f	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24g	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24h	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/24i	Person 1	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
Person 1/25	Person 1	Reply to email received from [Name Redacted] on 27 June 2024
Person 1/26	Person 1	Recently exposed return nozzle with dark staining on the outer wall of the slurry store 27/06/2024
Person 1/27	Person 1	No staining on the other slurry store walls at the unused high level inlet pipes 27/06/2024
Person 1/28	Person 1	Copy of Postal Caution sent to [Name Redacted] via recorded delivery dated 16/07/2024
Person 1/29a	Person 1	Copy of Proof of Certificate of Posting of Postal Caution sent to [Name Redacted] on 16 July 2024
Person 1/29b	Person 1	Copy of Proof of Delivery of Postal Caution sent to [Name Redacted] on 16 July 2024
Person 1/30	Person 1	Copy of second Postal Caution sent to [Name Redacted] by email (sent 05/09/2024)

Person 1/31	Person 1	Copy of email sent to [Name Redacted] attached to which was a second Postal Caution (05/09/2024 12:23)
Person 1/32	Person 1	Copy of email from [Name Redacted] (05/09/2024 13:56)
Person 1/33a	Person 1	Copy of email from [Name Redacted] (23/09/2024 09:01)
Person 1/33b	Person 1	Copy of email from [Name Redacted] (23/09/2024 13:37)
Person 1/33c	Person 1	Copy of email from [Name Redacted] (02/10/2024 14:39)
Person 1/33d	Person 1	Copy of email to [Name Redacted] (03/10/2024 10:08)
Person 1/33e	Person 1	Copy of email from [Name Redacted] (09/10/2024 00:21)
Person 1/33f	Person 1	Copy of email to [Name Redacted] (09/10/2024 11:40)
Person 1/34	Person 1	Copy of email from [Name Redacted] (31/10/2024 13:01)
Person 1/35a	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35b	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35c	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35d	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35e	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35f	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35g	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35h	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/35/i	Person 1	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024
Person 1/36a	Person 1	Copy of email sent to [Name Redacted] (31/10/2024 13:24)
Person 1/36b	Person 1	Copy of email from [Name Redacted] (31/10/2024 13:27)

6. OFFICERS CERTIFICATION

I certify that to the best of my knowledge and belief I have provided all relevant information, including all information that I believe could assist the defence in the early preparation of their case, including making a bail application.

Name of Investigator:	Person 4	Date	09/04/2025
Contact No.:	Redacted		
Email Address	Redacted		

7. SUPERVISORS CERTIFICATION

I certify this case file has been built to the required standard and contains an accurate summary of the investigation.

Name of Supervisor:	Person 3		
Contact No:	Redacted		
Email Address	Redacted		

SENIOR OFFICER'S RECOMMENDATION:

I have read the recommendation of the Investigating Officer, above and I agree/ I disagree.

Observations:

Name:	Grade:
Telephone No.:	Mobile No.:
Email:	Fax No.:

Dated

NORTHERN IRELAND ENVIRONMENT AGENCY

Investigation Summary Sheet

Investigating Officer: Person 1 **Grade:**WQI **Incident Ref:**WR3/24/0504

Alleged breach of:Water (Northern Ireland) Order 1999

By:[Name Redacted] **DoB / Company No.:** [Redacted]

Address: [Address Redacted]

Date of first investigation: 18 /05 /2024 **Time:**0945

Number of alleged offences:1

Date(s) relevant for charges to be brought:18/05/2024

Sample Point E/N(12): [Redacted] **Discharge point E/N(12):** [Redacted]

Waterway affected:Ballyclover Burn **Tributary of:**Six Mile River

Nature of contamination:Cow slurry

Weather conditions at time of investigation:Dry

Entered waterway/underground strata via:Drainage pipe

Incident severity level: Medium **Observed length of impact on waterway:** 850m

Condition of waterway upstream of discharge point:Clean

Sample collected by: Person 1

Date/Time of sampling: 18 /05 /2024 1400

Date/Time to Laboratory: 18 /05 /2024 1550

Delivered by: Person 2 **Received by:**Out of hours delivery

Sample served on (Name/Company):[Name Redacted] **Date/Time of serving:** 18/05/2024 1828

Date of Caution: 00/ 00 /2000 **Date of Interview:** 00/ 00 /2000

Interviewee: [Name Redacted] **Position:** Farmer

Signed: Person 1 **Date:** 26/11/24 **Grade:**WQI

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 (form PPS 8 (Departmental))

NIEA Ref: PR 09/24

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STATEMENT OF WITNESSSTATEMENT OF: **Person 1**AGE OF WITNESS (if over 21 enter "over 21"): **Over 21**OCCUPATION OF WITNESS: **Water Quality Inspector**ADDRESS: **Northern Ireland Environment Agency,** [REDACTED]
[REDACTED]

I declare that this statement consisting of 9 page(s) signed by me is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence at a preliminary enquiry or at the trial of any person, I shall be liable to prosecution if I wilfully stated in it anything which I know to be false or do not believe to be true.

Dated this 26th day of November 2024**Person 1**

SIGNATURE OF WITNESS

1. I, **Person 1**, am a Water Quality Inspector employed by Mid and East Antrim Borough Council. I carry out duties on behalf of the Water Management Unit (WMU) of Northern Ireland Environment Agency (NIEA), for whom I hold a current valid warrant card (Number EMFG [REDACTED]). I am an accredited sampler having been trained and audited for sampling procedures by the Northern Ireland Environment Agency (NIEA). I have held this post since 2007. I have a PhD in Aquatic Ecology and a BSc Honours Degree in Environmental Science.

Saturday 18 May 2024

2. At 0945 hours, I arrived at Ballyvoy Bridge, Doagh to investigate a report of water pollution received by NIEA the previous evening. I produce Exhibit **Person 1**/1, a sketch map of the Ballyclover Burn (upstream of Ballyvoy Bridge) and the Four Mile Burn (downstream of Ballyvoy Bridge).
3. I inspected the Four Mile Burn on the downstream side of Ballyvoy Bridge and I observed the water to be visually clear with no detectable odour. I also observed a number of dead fish lying on the bottom of the river. I proceeded to Doagh where I met with **Person 2** (Senior Scientific Officer, NIEA). I appraised **Person 2** of my observations at Ballyvoy Bridge.

Signature of Witness

Person 1Date 26/11/24

4. Mr **Person 2** and I then proceeded to Burn Road, Doagh and inspected the Four Mile Burn. I observed the water was visually clear with no detectable pour. I did not observe any dead fish. I photographed the Four Mile Burn and I produce Exhibit **Person 1/4**.
5. Mr **Person 2** and I then proceeded to Ballyvoy Bridge. I produce Exhibit **Person 1/2**, a sketch map of the Ballyclover Burn to Ballyvoy Bridge where it becomes the Four Mile Burn downstream of the bridge. Upon arrival, I photographed dead fish on the downstream side of the bridge (Four Mile Burn) and on the upstream side (Ballyclover Burn). I produce these photographs as Exhibits **Person 1/5** and **Person 1/6** respectively. I proceeded downstream and counted approximately 30 dead fish along a c. 25m stream of the river. In addition to the dead fish, I observed a number of dead macroinvertebrates on the bed of the river. This I photographed and I produce Exhibit **Person 1/7**.
6. I then proceeded upstream and inspected the Ballyclover Burn downstream of its confluence with the Loon Burn (opposite **Person 1** Ballymena Road). Having adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines, I inspected approximately 150m of the Ballyclover Burn and observed no dead fish.
7. Having rejoined **Person 2** and having adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines, we proceeded down a farm laneway leading to **Person 1** Ballymena Road and again inspected the Ballyclover Burn. I counted more than thirty dead fish along a c. 50m stretch of the river. I photographed some of these dead fish and I produce Exhibit **Person 1/8**.
8. **Person 2** and I then proceeded upstream along the Ballyclover Burn, following the dead fish in the waterway. I took two photographs of dead fish and I produce Exhibits **Person 1/9** and **Person 1/10**. The locations where these photographs were taken is depicted on Exhibit **Person 1/2**.
9. At 1210 hours, I observed a pipe actively discharging to the Ballyclover Burn from the left-hand bank. This I photographed and I produce Exhibit **Person 1/11**. I observed a light green coloured plume in the Ballyclover Burn for approximately 2-3m. I could detect an agricultural odour from the discharge which I believed to be weak dilute

Signature of Witness

Person 1Date 20/11/24

slurry. I proceeded upstream from this pipe to the next field boundary – a distance of approximately 75m. Over this distance I did not observe any more dead fish in the Ballyclover Burn. I observed some live fish. Due to the presence of dead fish up to this pipe and a lack thereof further upstream, I suspected this to be source of the pollutant which had caused the fish kill. Given the active discharge was generating only a small plume in the river, I suspected this to be the last vestiges of the polluting discharge. I informed Mr **Person 2** that I suspected the active discharge of weak dilute slurry from the plastic pipe constituted an offence under the Water (NI) Order 1999 and that I intended collecting a statutory sample of the discharge. **Person 2** and I then proceeded back to the NIEA van.

10. Having collected sampling equipment, **Person 2** and I returned to the actively discharging pipe. At 1240 hours, witnessed by **Person 2**, I collected a statutory sample of the weak dilute slurry actively discharging from the plastic pipe to the Ballyclover Burn. The statutory sample was collected accordance with the DAERA Procedure for the Manual Sampling of Waters M0106. I estimated the rate of discharge as approximately 50 l min⁻¹. I accorded the statutory sample the unique reference number WR3/24/0504. **Person 2** and I then proceeded back to the NIEA van where I sealed and labelled the bottles of the statutory sample. I described the sample as “taken from active discharge to Ballyclover Burn at **Person 2**”.
11. At 1338 hours, **Person 2** and I arrived at **[Address Redacted]** and adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines. On arrival at the farm yard we met with the owner **[Name Redacted]**. Having identified ourselves via Warrant Card, I explained the nature of our enquiries. I produce Exhibit **Person 1/3**, an orthophotograph of the farm at **[Address Redacted]**.
12. **[Name Redacted]**, **Person 2** and I then entered Field **Person 2** at the bottom of which was the pipe from which statutory sample WR3/24/0504 had been collected. Approximately 30m from the gate I observed a large circular inspection chamber cover, which **[Name Redacted]** stated was the same drain which would discharge at the bottom of the field. I retrieved a crow bar from the van and opened the inspection chamber. I observed two concrete inlet pipes and one plastic outlet pipe. This I photographed and I produce Exhibit **Person 1/12**. I observed the water in the top inlet

Signature of Witness **Person 1**

Date 26/01/24

pipe was visually clean, however, the liquid discharging through the left hand pipe was green in colour. I could detect a strong odour of slurry from the green discharge.

13. **[Name Redacted]** stated **[Name Redacted]** may know the source of this green discharge and escorted **Person 2** and I to a below ground slurry store at the rear of the farm yard adjacent to the meal bin. **[Name Redacted]** stated **[Name Redacted]** had moved slurry to the slurry store the previous night. I observed dried slurry on the slats of the below ground slurry store and I photographed same. I produce Exhibit **Person 1**/13. **[Name Redacted]** asked **[Name Redacted]** to bring over the digger so he could uncover an inspection chamber immediately adjacent to the meal bin. I discussed with **[Name Redacted]** the details of the fish kill as they were known at that time. **Person 2** and I also discussed with **[Name Redacted]** enforcement policy and procedure. I explained my intention to collect a statutory sample of the active discharge in the inspection chamber in Field **[Name Redacted]**. **[Name Redacted]** declined to witness the collection of the sample.

14. **Person 2** and I departed from **[Name Redacted]**, collected sampling equipment from the NIEA van and returned to the inspection chamber in Field 13. At 1400 hours, witnessed by **Person 2**, I collected a statutory sample of the slurry actively discharging from the left hand concrete pipe in the inspection chamber. The statutory sample was collected accordance with the DAERA Procedure for the Manual Sampling of Waters M0106. I estimated the rate of discharge as approximately 5 l min⁻¹. **Person 2** and I were joined by **[Name Redacted]** as I began decanting the statutory sample into the sample bottles. I accorded the statutory sample the unique reference number WR3/24/0504B.

15. I locked the bottles of statutory sample WR3/24/0504B along with WR3/24/0504 in the NIEA van and **Person 2** and I proceeded with **[Name Redacted]** back to the uncovered inspection chamber adjacent to the meal bin. This I photographed and I produce Exhibit **Person 1**/14. On closer inspection I observed a dark coloured liquid at the outlet pipe from the chamber (left hand pipe), however, I observed no liquid flowing through the chamber. I photographed the inside of the inspection chamber and I produce Exhibit **Person 1**/15. **[Name Redacted]** stated **[Name Redacted]** would remove the six loads of slurry which he had transferred to the below ground store the previous day and immediately spread this slurry to fields.

Signature of Witness **Person 1**

Date 26/01/24

16. **Person 2** and I left **[Name Redacted]** and returned to the NIEA van where I sealed and labelled the bottles of statutory sample WR3/24/0504B. I described the sample as "taken from inspection chamber in field in front of farm at **[Address Redacted]**". While sealing and labelling the bottles and writing up notes, I observed **[Name Redacted]** operating a tractor and slurry tanker.
17. At 1520 hours, **[Name Redacted]**, **Person 2** and I returned to Field **[Name Redacted]** and opened the inspection chamber. I observed that the green discharge of slurry through the left hand pipe was continuing. **[Name Redacted]**, **Person 2** and I proceeded to the bottom of Field **[Name Redacted]** inspected the Ballyclover Burn and showed **[Name Redacted]** the light green coloured plume in same.
18. On returning to the yard, **[Name Redacted]** returned to the tractor and slurry tanker. At 1528 hours, witnessed by **Person 2** I introduced green drain tracing dye to the flow of liquid actively in the inspection chamber in Field **[Name Redacted]**. This I photographed and I produce Exhibit **Person 1/16**. **Person 2** and I proceeded to the Ballyclover Burn. At 1530 hours, I observed green dye actively discharging to the Ballyclover Burn. This I photographed and I produce Exhibit **Person 1/17**.
19. **Person 2** and I rejoined **[Name Redacted]** in the yard at 1545 hours. I explained to the formalities which I needed to conduct. At 1547 hours, I read the caution to **[Name Redacted]** as written on my Warrant Card (**[Name Redacted]**). I made contemporaneous notes of the subsequent interview in my NIEA issued notebooks **[Name Redacted]**. **Person 2** was present during the interview. I produce a transcript of the interview as Exhibit **Person 1/18**. I concluded the interview at 1601 hours. **[Name Redacted]** declined to have the notes of the interview read back.
20. At 1603 hours, I offered **[Name Redacted]** and **[Name Redacted]** selected and retained one portion of statutory sample WR3/24/0504 and one portion of statutory sample WR3/24/0504B. **[Name Redacted]** and I then exchanged contact details and agreed to a revisit early the following week. At 1611 hours, **Person 2** and I departed the farm.
21. At 1630 hours, I transferred custody of the two remaining portions of statutory sample WR3/24/0504 and the two remaining portions of statutory sample WR3/24/0504B to

Signature of Witness **Person 1**Date 26/11/24

Person 2 for onward transport to the NIEA chemistry laboratory in Lisburn.

Person 2 signed my NIEA issued notebook () in receipt.

Tuesday 21 May 2024

22. At 1500 hours, **Person 2** and I arrived at **[Address Redacted]** and adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines. We were joined in the yard at 1507 hours by **[Name Redacted]**. I observed a farm worker removing slurry from the below ground slurry store and applying this slurry to nearby fields.
23. **[Name Redacted]**, **Person 2** and I proceeded to Field **[]** and opened the inspection chamber. I observed the rate of flow through the left hand pipe was similar to that on Saturday 18 May 2024, with a very slight residual green colour visible. This I photographed and I produce Exhibit **Person 1 / 19**. **[Name Redacted]** outlined the further remedial which **[]** had planned for the next few days. Having agreed to a further revisit, we returned to the farm yard. **Person 2** and I discussed NIEA enforcement policy and procedures with **[Name Redacted]** before departing at 1540 hours.

Friday 24 May 2024

24. At 1339 hours, I received a call from **[Name Redacted]** to say the slurry tank was empty and that further exploratory digger work was due to be undertaken the following week.

Thursday 30 May 2024

25. I rang **[Name Redacted]** on three occasions, but I received no answer.

Monday 3 June 2024

26. At 1138 hours, I received a call from **[Name Redacted]** to say he had inspected the below ground tank from the inside and observed no issues. **[Name Redacted]** stated that the liquid flowing through the inspection chamber was visually clean. **[Name Redacted]** further stated that a rock hammer was required to carry out the further exploratory work to the below ground slurry store.

Tuesday 11 June 2024

27. At 1505 hours, **Person 2** and I arrived at **[Address Redacted]** and adhered to NIEA Agricultural Regulations bio-security and health and safety

Signature of Witness

Person 1

Date 26/11/24

guidelines. We met with **[Name Redacted]** in the yard, proceeded to Field **[redacted]** and opened the inspection chamber. I observed flow through the inspection chamber was visually clean. This I photographed and I produce Exhibit **Person 1/20**. **[Name Redacted]**, **Person 2** **[redacted]** and I proceeded to the below ground slurry store and inspected same. I observed the level of the slurry was very near the bottom of the store. This I photographed and I produce Exhibit **Person 1/21**. **[Name Redacted]** opened the inspection chamber adjacent to the meal bin and I observed any liquids therein were visually clean. This I photographed and I produce Exhibit **Person 1/22**. **[Name Redacted]** again outlined the further remedial which **[redacted]** had planned. Having agreed to a further revisit on 27 June 2024, **Person 2** and I departed the farm at 1548 hours.

Thursday 27 June 2024

28. At 0027 hours, **[Name Redacted]** sent me an email outlining the works which he had undertaken at the below ground slurry store. I produce a copy of this email as Exhibit **Person 1/23**. Attached to this email were nine photographs. I produce copies of these nine photographs as Exhibits **Person 1/24a** to **Person 1/24i**. At 0939 hours, I acknowledged receipt of this email. I produce a copy of my response as Exhibit **Person 1/25**.
29. At 1510 hours, **Person 2** and I arrived at **[Address Redacted]** and adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines. We met with **[Name Redacted]** in the yard and proceeded to the below ground slurry store. I observed excavation works had been undertaken to the rear right-hand side of the store. **[Name Redacted]** explained that the excavation work had been to expose the blue plastic slurry mixing pipe (which I observed lying parallel to the slurry store) and the black plastic "return nozzle" (which I observed towards the rear of the slurry store). **[Name Redacted]** stated this return nozzle had been encased in concrete, necessitating the use of rock hammer to expose it. On closer inspection of the return nozzle, I observed dark staining on the outer wall of the slurry store. This I photographed and I produce Exhibit **Person 1/26**. I also inspected several unused high level inlet pipes (which were bunged) and observed no staining on the outer wall of the slurry store. This I photographed and I produce Exhibit **Person 1/27**.
30. **[Name Redacted]** stated that it was **[redacted]** belief that the slurry had discharged in the vicinity of the return nozzle. I offered **[Name Redacted]** an opportunity to make a further statement

Signature of Witness

Person 1

Date 26/01/24

under caution in respect of the work **█** had undertaken and the findings of same. **[Name Redacted]** agreed to provide a written statement and I undertook to send **█** a written letter of caution. **Person 2** **█** and I discussed NIEA's enforcement policy and procedure and then departed from the farm at 1530 hours.

Tuesday 16 July 2024

31. At 1352 hours, I sent a postal caution to **[Name Redacted]**, **[Address Redacted]** via recorded delivery. I produce a copy of this postal caution as Exhibit **Person 1**/28. I included a copy of the transcript on the Interview Under Caution conducted on 18 May 2024 – see Exhibit **Person 1**/18. I produce a copy of the Certificate of Posting as Exhibit **Person 1**/29a.

Thursday 18 July 2024

32. I confirmed via the Royal Mail Track & Trace website that the postal cation sent to **[Name Redacted]** had been signed for on 17 July 2024. I produce a copy of this Confirmation of Delivery as Exhibit **Person 1**/29b.

Thursday 15 August 2024

33. Having not received a response to the Postal Caution sent on 18 July 2024, at 1306 hours, I rang to **[Name Redacted]**, however, I received no answer.
34. I attempted to make further contact with **[Name Redacted]** on 19 August 2024, 27 August 2024 and 2 September 2024 but with no success.

Wednesday 4 September 2024

35. Having been unable to make contact with **[Name Redacted]** via telephone, I proceeded to **[Address Redacted]** and adhered to NIEA Agricultural Regulations bio-security and health and safety guidelines upon arrival. I met with **[Name Redacted]** in the farmyard and explained my visit. **[Name Redacted]** stated **█** had been receiving hoax and scam phone calls to **█** mobile and was not answering withheld numbers. **[Name Redacted]** **█** agreed for a second postal caution letter to be sent to him by email.

Thursday 5 September 2024

36. At 1223 hours, I emailed a second Postal Caution to letter to **[Name Redacted]**. I produce a copy of this Postal Caution as exhibit **Person 1**/30. I produce a copy of the email as Exhibit **Person 1**/31. At 1356 hours, I received a response to my email from **[Name Redacted]**

Signature of Witness

Person 1

Date 26/11/24

[Name Redacted] stating that **[Name Redacted]** would provide a response within a fortnight. I produce a copy of this email as Exhibit **Person 1/32**.

37. During September and October, **[Name Redacted]** maintained contact with myself via email, providing me with updates of the remedial site works being undertaken. I produce a copy of these email as Exhibits **Person 1/33a – Person 1/33f**.

Thursday 31 October 2024

38. Received email from **[Name Redacted]** in response to the Postal Caution sent to **[Name Redacted]** on 5 September 2024. I produce a copy of this email as Exhibit **Person 1/34**. Attached to this email were nine photographs. I produce a copy of these photographs as Exhibit **Person 1/35a – Person 1/i**. I acknowledged receipt of the email and I produce a copy of this email, along with **[Name Redacted]** response as Exhibit **Person 1/36a** and **Person 1/36b** respectively.

39. During the investigation, between Saturday 18 May 2024 and Thursday 27 June 2024, I took a series of twenty digital photographs. I downloaded these photographs onto my work computer without enhancing or altering them in any way, except to resize them to fit them onto an A4 page. The images have since remained within my control.

Signature of Witness **Person 1**

Date 26/10/24

Signature of Witness **Person 1**

Date 26/10/24

SIGNATURE OF WITNESS:

Person 2

Statement of Person 2

With Person 1, we then returned to our vehicles to pick up kit and then returned to the discharging pipe. Person 1 proceeded to collect a tripartite statutory sample of the discharge with me as a witness, sample WR 3/24/0504.

Person 1 and I then travelled in our vehicles to the laneway of a farm at [Address Redacted], arriving at 1338hrs. I sprayed my boots following procedure and travelled with Person 1 up the lane to the farm. We met a man on site who introduced himself as [Name Redacted], the farm owner. We introduced ourselves, showing our warrant cards, and explained the reason for our visit. Person 1, [Name Redacted] and I then checked a manhole in the field between the farm and waterway. There was a flow of what appeared to be agricultural effluent in the manhole with the direction of flow towards the waterway.

Person 1 [Name Redacted] and I then travelled back to the farmyard and inspected the underground slurry tanks beside a feed silo. [Name Redacted] indicated that [Name Redacted] had transferred slurry to the tank on the evening of Friday 17 May 2024. The manhole on the ground by the feed silo required clearing which [Name Redacted] indicated [Name Redacted] would then do. Person 1 and I then travelled back to the manhole in the field between the farm and waterway. [Name Redacted] remained at the farmyard.

At 1400hrs on 18 May 2024, I witnessed Person 1 collect a tripartite statutory sample of the agricultural effluent flowing through the manhole in the field, sample WR 3/24/0504B. [Name Redacted] rejoined Person 1 and I during the collection of the sample. Person 1 [Name Redacted] and I then returned to the farmyard. [Name Redacted] explained how the on-site drainage and transfer system operated. Agricultural effluent was noted in the now uncovered manhole adjacent to the feed silo.

[Name Redacted] removed a number of loads of slurry from the underground tank to attempt to reduce the level in the tank. [Name Redacted] said that [Name Redacted] had added 6 loads of slurry to the tank on the evening of Friday 17 May 2024. Person 1 and I returned to our vehicle where I observed Person 1 label and seal the samples collected, WR 3/24/0504B. At 1520hrs on 18 May 2024, [Name Redacted] rejoined us and all three of us returned to the manhole in the field. We went to the bottom of the field to observe where the pipe entered the waterway below the farm. Person 1 then added tracer dye to the flow in the manhole and at 1530hrs this was observed discharging to the waterway. [Name Redacted] photographed this.

Back at the farmyard, Person 1 explained the NIEA enforcement process to [Name Redacted]. At 1547hrs on 18 May 2024, I witnessed Person 1 formally caution and interview [Name Redacted]. The interview concluded at 1600hrs. Person 1 offered [Name Redacted] the selection of a portion of each of the 2 sets of statutory samples that had been collected, WR 3/24/0504 and WR 3/24/0504B.

SIGNATURE OF WITNESS:

Person 2

Statement of Person 2

SIGNATURE OF WITNESS:

Person 2

Statement of Person 2

[Name Redacted] selected 1 portion from each set of samples. We left the site and I transferred the samples to the NIEA Water Management Unit laboratory at Lisburn, for storage and analyses, where I booked them in at 1739hrs. Person 1 took a number of photographs during the investigation.

On 21 May 2024, I arranged and met with Person 1 at the laneway serving [Address Redacted]. I sprayed my boots following set procedures. We travelled up to the farmyard where we met with [Name Redacted]. [Name Redacted] said that [Name Redacted] was still drawing down from the slurry tank and spreading it on [Name Redacted] fields. Person 1, [Name Redacted] and I checked the manhole in the field between the farm and the waterway. The discharge flow rate looked similar to that on the visit of 18 May 2024 but the effluent in it appeared to be running clearer and had less of a slurry-like odour. [Name Redacted] said that the flow through the manhole takes some of its volume from a spring on the farm. [Name Redacted] explained the actions [Name Redacted] had taken since the 18 May 2024 and described the additional actions planned. Person 1 and I agreed with [Name Redacted] that we would revisit at a later date. Person 1 further explained to [Name Redacted] the NIEA Water (NI) Order 1999 enforcement process that would follow. Person 1 and I left the farmyard at 1540hrs on 21 May 2024.

On 11 June 2024, I arranged and met with Person 1 at the laneway serving [Address Redacted]. I arrived at 1505hrs and sprayed my boots following set procedures. Person 1 and I travelled up to the farm and met with [Name Redacted]. Person 1, [Name Redacted] and I checked the manhole in the field between the farm and the waterway. The flow in the manhole was observed to be running clear. Person 1 and I checked the underground slurry tank, the volume of which was noted to have been reduced to a level of approx. 12 inches. [Name Redacted] said that [Name Redacted] still had further work to complete following the incident. Person 1 and I agreed to revisit the site on 27 June 2024. [Name Redacted] was asked to inform us when the additional work was complete. Person 1 and I left the farmyard at 1548hrs on 11 June 2024.

On 27 June 2024, I arranged and met with [Name Redacted] at the laneway serving [Address Redacted]. I arrived at 1510hrs and sprayed my boots following set procedures. [Name Redacted] and I again checked the underground slurry tank. Excavations were noted to have been carried out and the outlet pipe was visible. An obvious 'rat hole' was noted at the outlet pipe which was the likely mechanism through which slurry had discharged to the manhole in the field and, subsequently, to the Four Mile Burn waterway. [Name Redacted] explained that 2 higher level outlets on the underground tank were bunged. [Name Redacted] explained the further additional works that [Name Redacted] was to carry out. Person 1 explained to [Name Redacted] [Name Redacted] options for making a formal statement. [Name Redacted] and I left the farmyard at 1530hrs on 27 June 2024.

SIGNATURE OF WITNESS:

Person 2

Statement of Person 2

STATEMENT OF WITNESS

TI 2400095

STATEMENT OF:

Person 5

AGE OF WITNESS (If over 21 enter "over 21"):

OVER 21

OCCUPATION OF WITNESS:

CIVIL SERVANT

ADDRESS:

NORTHERN IRELAND ENVIRONMENT AGENCY,
17 ANTRIM ROAD, TONAGH, LISBURN, BT28 3AL

TO BE COMPLETED
WHEN THE
STATEMENT HAS
BEEN WRITTEN

I declare that this statement consisting of 2 pages, each signed by me is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence at a preliminary enquiry or at the trial of any person, I shall be liable to prosecution if I have wilfully stated in it anything which I know to be false or do not believe to be true.

Dated this

19th

day of

June

2024

Person 5

SIGNATURE OF MEMBER by whom
statement was recorded or received.

SIGNATURE OF WITNESS

I am a Higher Scientific Officer employed by the Northern Ireland Environment Agency (NIEA). On 18/05/2024, Person 2 on behalf of NIEA, delivered two statutory samples to the laboratory refrigerator. I retrieved the samples from the fridge the following morning and checked them. Sample seals were intact. The samples were labelled as follows:-

Sample A Id:

WR3/24/0504

Taken from:

Active discharge to Ballyclover Burn at

Taken by:

Person 1

Witness:

Person 2

Date & Time taken:

18/5/24 at 12:40

Visible Oil or Grease:

No

Sample B Id:

WR3/24/0504 B

Taken from:

Inspection chamber in field in front of farm
at [Address Redacted]

Taken by:

Person 1

Witness:

Person 2

Date & Time taken:

18/5/24 at 14:00

Visible Oil or Grease:

No

Upon receipt in the laboratory the samples were given the identification number TI 2400095.

SIGNATURE OF WITNESS

Person 5

TI 2400095

STATEMENT OF:

Person 5

CONTINUATION PAGE NO: 2**EXAMINATION OF SAMPLE**

My examination was conducted with the assistance of scientific support staff. A full record of the work undertaken is contained within the laboratory records made at the time of the examination and those are available for inspection.

The analysis was carried out by NIEA staff using the following test methods:-

pH	In-house method M0387
Biochemical Oxygen Demand	In-house method M0145
Suspended Solids	In-house method M0152
Total Ammonia	In-house method M0172
Total Chloride	In-house method M0173

RESULTS

The results of the analysis were as follows:

Test	Sample A Result	Sample B Result	Date of Test
pH	7.7	7.5	19/05/2024
Biochemical Oxygen Demand (ATU) 5 days at 20°C as O ₂	231	1500	21/05/2024
Suspended Solids	59	343	19/05/2024
Total Ammonia as N	26	164	20/05/2024
Chloride as Cl	31	103	20/05/2024

All results, except pH, are expressed as milligrams per litre.

CONCLUSIONS

The results of the analysis show that the sample A had a high Biochemical Oxygen Demand along with high Total Ammonia contents.

The results of the analysis show that the sample B had a very high Biochemical Oxygen Demand along with high Total Ammonia and Suspended Solids contents.

The material represented by both samples A and B contained poisonous, noxious or polluting matter which would have been potentially harmful to aquatic life in a receiving waterway.



Department of
**Agriculture, Environment
and Rural Affairs**

www.daera-ni.gov.uk

Statement of Witness

URN:

Statement of: **Person 6**

Occupation: **Senior Fisheries Officer**

Age of
Witness: Over 18

(if over 18 insert 'over 18')

I declare that this statement consisting of 2 pages, each signed by me is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence at a preliminary enquiry or at the trial of any person, I shall be liable to prosecution if I have wilfully stated in it anything which I know to be false or do not believe to be true.

Signature: **Person 6** Date: 24 May 2024

My name is **Person 6** and I am employed as a Senior Fisheries Officer for the Department of Agriculture, Environment and Rural Affairs and I hold a valid warrant card issued under the Fisheries Act (N.I.) 1966 as amended. On the 18th May 2024 at 1110hrs I was contacted as the on-call Senior Officer for DAERA Inland Fisheries by **Person 2** (DEPO) Duty Emergency Pollution Officer for (NIEA) Northern Ireland Environment Agency who was on-call for out of hours response for Pollution and Fisheries hotline with reports of a pollution incident and possible fish kill on the 4 mile Burn which is a tributary of the six mile water involving fish of varying species and age classes and there was 30 dead fish, due to the phone signal I was unable to confirm all of the information. At 1241hrs I received a call from **Person 2** and was unable to hear any of the information trying to be relayed to me. At 1305hrs I was able to make a phone call to **Person 2** and have a conversation where **Person 2** confirmed dead fish on the 4-mile burn and a source had been located. I then contacted **Person 7** Fisheries Protection Officer for the Department of Agriculture, Environment and Rural Affairs who holds a valid warrant card issued under the Fisheries Act (N.I.) 1966 as amended to request **Person 7** attendance to assist me with an assessment of the 4 mile burn for fish mortalities. At 1549hrs I met with **Person 7** at the bridge over the 4 mile burn at Holywell Road, Doagh BT39 0DN, on arrival at this location we both observed dead fish in the waterway, a member of the public now known to me as **Person 7**, also made the following statement "This pollution coming down the river is being reported on a weekly basis and was last reported on Thursday night past. Last Night it was running brown in colour giving of a pungent smell". **Person 7** and I then visited the following locations on the 4 mile burn further downstream of Holywell Road bridge; Ballywee road bridge - dead fish observed in the waterway, Grange Road bridge - no dead fish observed and Burn Road bridge - no dead fish observed. **Person 7** and I then commenced are assessment of dead fish numbers starting from the bridge

Signature of witness:

Person 6

Date:

24/05/2024

located at [REDACTED] The assessment of fish mortalities took place over the 18th and 19th May 2024 with the following dead fish counted during this assessment. From suspected source to bridge on Ballymena Road (Ballyclover Burn)

Age Class – Species Brown Trout

- 0+ 130
- 1+ 121
- 2+ 33
- 3+ 15

From Bridge on Ballymena Road to Bridge on Ballywee Road (Ballyclover Burn running into 4-mile Burn)

Age Class – Species brown trout

- 0+ 358
- 1+ 270
- 2+ 88
- 3+ 14

From Bridge on Ballywee Road to Bridge on Grange Road (4-mile Burn)

Age Class – Species brown trout

- 0+ 30
- 1+ 32
- 2+ 16
- 3+ 2

Total Count as follows over the entire affected stretch (Ballyclover/4-mile burn) is as follows:

Age Class – Species brown trout

- 0+ 518
- 1+ 423
- 2+ 137
- 3+ 31

Person 6

Signature of witness:

Date:

24/05/2024



Department of
**Agriculture, Environment
and Rural Affairs**

Statement of Witness

URN:

Statement of: **Person 7**

Occupation: **Fisheries Officer**

Age of
Witness: Over 18

(If over 18 insert 'over 18')

I declare that this statement consisting of 1 page, each signed by me is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence at a preliminary enquiry or at the trial of any person, I shall be liable to prosecution if I have wilfully stated in it anything which I know to be false or do not believe to be true.

Signature: **Person 7** Date: **20th May 2024**

I am a Fisheries Officer currently employed by the Department of Agriculture, Environment and Rural affairs (DAERA) Inland Fisheries. I am warranted under the Fisheries Act (Northern Ireland) 1966.

Inland Fisheries Officers attended the 4 Mile Burn and Ballyclover Burn to conduct a fish kill assessment on the 18th and 19th May 2024. **Person 6** Senior Fisheries Officer, and I **Person 7** Fisheries Protection Officer conducted the assessment on fish mortalities, we entered the river at the suspected source and headed downstream to the Ballymena Road Bridge on the Ballyclover Burn. The fish mortalities where as follows: **Brown Trout – (0+) = 130, Brown Trout – (1+) = 121, Brown Trout – (2+) = 33 and Brown Trout – (3+) = 15**. I could also see slurry in parts of the river that had gathered up behind tree branches and rock pools

We continued downstream from the bridge on Ballymena Road to the bridge on Ballywee Road Ballyclover Burn running into 4-Mile Burn. The fish mortalities recorded on this stretch where as follows: **Brown Trout – (0+) = 358, Brown Trout – (1+) = 270, Brown Trout - (2+) = 88 and Brown Trout – (3+) = 14**.

From the bridge on the Ballywee Road to the bridge on the Grange Road (4 Mile Burn) we recorded the following fish mortalities, **Brown Trout – (0+) = 30, Brown Trout – (1+) = 32, Brown Trout – (2+) = 16 and Brown Trout – (3+) = 2**. Non-Salmonid fish species where not assessed but I could see there was large numbers of mortalities of Stone Loach and Stickleback.

We continued downstream from the bridge on the Grange Road to the Burn Road. It was from this point on where we could see no more fish mortalities. The water clarity was good

Signature of witness:

Person 7

Date: 20th May 2024

Statement of Witness

STATEMENT OF: **Person 8**

AGE OF WITNESS (IF OVER 21 ENTER "OVER 21"): Over 21

OCCUPATION OF WITNESS: Deputy Chief Fisheries Officer

ADDRESS: DAERA Inland Fisheries Inspectorate Branch, Clare House, 303 Airport Road West, Belfast BT3 9ED

To be completed when the statement has been written

I declare that this statement consisting of 3 page(s), each signed by me is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence at a preliminary enquiry or at the trial of any person, I shall be liable to prosecution if I have willfully stated in it anything which I know to be false or do not believe to be true

Dated this the 17th March 2025

Person 8

.....
SIGNATURE OF MEMBER by whom statement was recorded or received

.....
SIGNATURE OF WITNESS

I am employed as a Deputy Chief Fisheries Officer for the Department of Agriculture Environment and Rural Affairs, and I hold a valid warrant card issued under the Fisheries Act (Northern Ireland) 1966. I have a BSc in Environmental Science and an MSc in Marine and Fisheries Science.

Following the report of a fish kill event on the Four Mile Burn, Doagh on the 17th May 2024 case file number WR 3/24/0504

I have been asked to provide a calculation of costs for the replacement of the fish killed.

This has been calculated using the price list for Brown Trout at Movanagher fish farm. The site is operated by the Department of Agriculture Environment and Rural Affairs.

0+ Brown trout were priced using the cost for fish at 5cm fingerling stage.

1+ Brown trout were priced using the cost for fish at 13cm fingerling stage.

STATEMENT CONTINUATION PAGE

STATEMENT OF **Person 8** CONTINUATION PAGE NO: 2

2+ Brown trout were priced using the mean cost for fish between 17cm and 19cm growing stage.

3+ Brown trout were priced using the using the mean cost for fish between 21cm and 25cm stages.

In order to account for the wild survival rates of any fish restocked this figure has then been multiplied by a factor of two.

TROUT PRICE LIST PRICE PER 1,000 FISH (£)

Approx Age Class	Length of Fish	Brown Trout	Approx weight	Mean Cost
0+	Eyed Ova	23.00	N/A	<u>Excluded</u>
0+ Fry	Unfed fry	39.00	0.25g	<u>Excluded</u>
0+ Fry	6 week fed fry	58.00	0.5g	<u>Excluded</u>
0+ Fingerlings	5cm/2 inches	127.00	15g	<u>127.00</u>
0+ Fingerlings	9cm/3.5 inches	252.00	25g	<u>Excluded</u>
0+ Fingerlings	13cm/5 inches	415.00	40g	<u>415.00</u>
1+ Growers	17cm/7 inches	641.00	80g	
1+ Growers	19cm/8 inches	823.00	100g	<u>732.00</u>
1+ Growers	21cm/8 inches	1003.00	120g	
1+ Takeable	25cm/10 inches	1603.00	250g	<u>1303.00</u>
2+ Takeable	Larger Fish Per Kg	3390.00	500g	<u>Excluded</u>

Extrapolated fish kill count and cost calculation

Age Class	Dead Fish Carcass Count	Dead Fish Carcass Count (Extrapolated for 4hrs post fish kill)	% Carcass Recovery *(after Kennedy et al, 2017)	Costing	Sub Total £	Total
Trout						
0+	518	996	52	127/1000	126.49	X 2 in order to account
1+	423	595	71	415/1000	246.92	
2+	137	147	93	732/1000	107.60	

Person 8

STATEMENT CONTINUATION PAGE

STATEMENT OF

Person 8

CONTINUATION PAGE NO: 3

3+	31	33	93	1303/1000	42.99	for wild survival rates
					524.00	£1048.00

The extrapolated fish kill count is based on the peer reviewed paper "An assessment of carcass counting surveys with increasing time lapse following a simulated fish kill on a small upland stream" (Kennedy et al, 2017). I have exhibited a copy of this paper as exhibit **1**.

Total cost for the replacement of the fish killed as documented above is one thousand and forty eight pounds only £1048.00.

Restocking costs form the basis for the above calculation of costs. Contemporary scientific evidence highlights potential significant negative genetic effects from the introduction of hatchery reared trout. By application of a precautionary approach and to follow scientific advice, fisheries conservation and protection is best maintained through the preservation of local genetic strains specific to individual river reaches.

River improvements can be conducted through other means including direct fisheries habitat improvement, ensuring no negative genetic impacts occur to local fish stocks.

The above costs represent a minimum estimate of costs when compared with potential costs associated with directly improving fisheries habitats. It is proposed that any compensation is spent on direct replacement stocking or habitat improvement measures.

Person 8

Person 8

Part III: INDEX TO EVIDENTIAL ITEMS Page 1 of 5
(form PPS 9 (Departmental))

NIEA Ref: PR09/24

ID MARK.	DESCRIPTION	PRODUCED BY	HELD BY/ ON FILE	Page No (s)
Person 1/1	Sketch map of the Ballyclover Burn and Four Mile Burn	Person 1	On File	1
Person 1/2	Sketch map of the Ballyclover Burn to Ballyvoy Bridge where it becomes the Four Mile Burn	Person 1	On File	1
Person 1/3	Orthophotograph of the farm at [Address Redacted]	Person 1	On File	1
Person 1/4	Four Mile Burn visually clean and no dead fish observed (18/05/2024)	Person 1	On File	1
Person 1/5	Dead fish in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024	Person 1	On File	1
Person 1/6	Dead fish in Ballyclover Burn (immediately upstream of Ballyvoy Bridge) 18/05/2024	Person 1	On File	1
Person 1/7	Dead macroinvertebrates in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024	Person 1	On File	1
Person 1/8	Dead fish in Ballyclover Burn 18/05/2024	Person 1	On File	1
Person 1/9	Dead fish in Ballyclover Burn 18/05/2024	Person 1	On File	1
Person 1/10	Dead fish in Ballyclover Burn 18/05/2024	Person 1	On File	1
[Redacted]	Pipe actively discharging weak dilute slurry to the Ballyclover Burn at [Redacted] Statutory sample WR 3/24/0504 was collected from this location 18/05/2024	Person 1	On File	1
Person 1/12	Flow of green coloured agricultural effluent through inspection chamber in Field [Redacted] at [Address Redacted]. Statutory sample WR3/24/0504B was collected from this location 18/05/2024	Person 1	On File	1



Part III: INDEX TO EVIDENTIAL ITEMS Page 2 of 5
(form PPS 9 (Departmental))

NIEA Ref: PR09/24

ID MARK.	DESCRIPTION	PRODUCED BY	HELD BY/ ON FILE	Page No (s)
Person 1/13	Dried slurry on the slats of the below ground slurry store 18/05/2024	Person 1	On File	1
Person 1/14	Inspection chamber adjacent to slurry tank 18/05/2024	Person 1	On File	1
Person 1/15	Inspection chamber adjacent to slurry tank 18/05/2024	Person 1	On File	1
Person 1/16	Drain tracing dye in inspection chamber in Field [Redacted] (18/05/2024)	Person 1	On File	1
Person 1/17	Drain tracing dye actively discharging to the Ballyclover Burn at [Redacted] (18/05/2024)	Person 1	On File	1
Person 1/18	Transcript of Interview with [Name Redacted], recorded by hand, on 18 May 2024, at [Address Redacted], by Person 1 NIEA	Person 1	On File	2
Person 1/19	Inspection chamber in Field [Redacted] (18/05/2024)	Person 1	On File	1
Person 1/20	Inspection chamber in Field [Redacted] (18/05/2024)	Person 1	On File	1
Person 1/21	Level of the slurry very near the bottom of the store (11/06/2024)	Person 1	On File	1
Person 1/22	Liquid in bottom of inspection chamber adjacent to meal bin visually clean (11/06/2024)	Person 1	On File	1
Person 1/23	Email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24a	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24b	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1



Part III: INDEX TO EVIDENTIAL ITEMS Page 3 of 5
(form PPS 9 (Departmental))

NIEA Ref: PR09/24

ID MARK.	DESCRIPTION	PRODUCED BY	HELD BY/ ON FILE	Page No (s)
Person 1/24c	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24d	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24e	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24f	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24g	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24h	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/24i	Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours	Person 1	On File	1
Person 1/25	Reply to email received from [Name Redacted] on 27 June 2024	Person 1	On File	1
Person 1/26	Recently exposed return nozzle with dark staining on the outer wall of the slurry store 27/06/2024	Person 1	On File	1
Person 1/27	No staining on the other slurry store walls at the unused high level inlet pipes 27/06/2024	Person 1	On File	1
Person 1/28	Copy of Postal Caution sent to [Name Redacted] via recorded delivery dated 16/07/2024	Person 1	On File	5
Person 1/29a	Copy of Proof of Certificate of Posting of Postal Caution sent to [Name Redacted] on 16 July 2024	Person 1	On File	1



Part III: INDEX TO EVIDENTIAL ITEMS Page 4 of 5
(form PPS 9 (Departmental))

NIEA Ref: PR09/24

ID MARK.	DESCRIPTION	PRODUCED BY	HELD BY/ ON FILE	Page No (s)
Person 1/29b	Copy of Proof of Delivery of Postal Caution sent to [Name Redacted] on 16 July 2024	Person 1	On File	1
Person 1/30	Copy of second Postal Caution sent to [Name Redacted] by email (sent 05/09/2024)	Person 1	On File	5
Person 1/31	Copy of email sent to [Name Redacted], attached to which was a second Postal Caution (05/09/2024 12:23)	Person 1	On File	1
Person 1/32	Copy of email from [Name Redacted] (05/09/2024 13:56)	Person 1	On File	1
Person 1/33a	Copy of email from [Name Redacted] (23/09/2024 09:01)	Person 1	On File	1
Person 1/33b	Copy of email from [Name Redacted] (23/09/2024 13:37)	Person 1	On File	1
Person 1/33c	Copy of email from [Name Redacted] (02/10/2024 14:39)	Person 1	On File	1
Person 1/33d	Copy of email to [Name Redacted] (03/10/2024 10:08)	Person 1	On File	1
Person 1/33e	Copy of email from [Name Redacted] (09/10/2024 00:21)	Person 1	On File	1
Person 1/33f	Copy of email to [Name Redacted] (09/10/2024 11:40)	Person 1	On File	1
Person 1/34	Copy of email from [Name Redacted] (31/10/2024 13:01)	Person 1	On File	3
Person 1/35a	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35b	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35c	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1



Part III: INDEX TO EVIDENTIAL ITEMS Page 5 of 5
(form PPS 9 (Departmental))

NIEA Ref: PR09/24

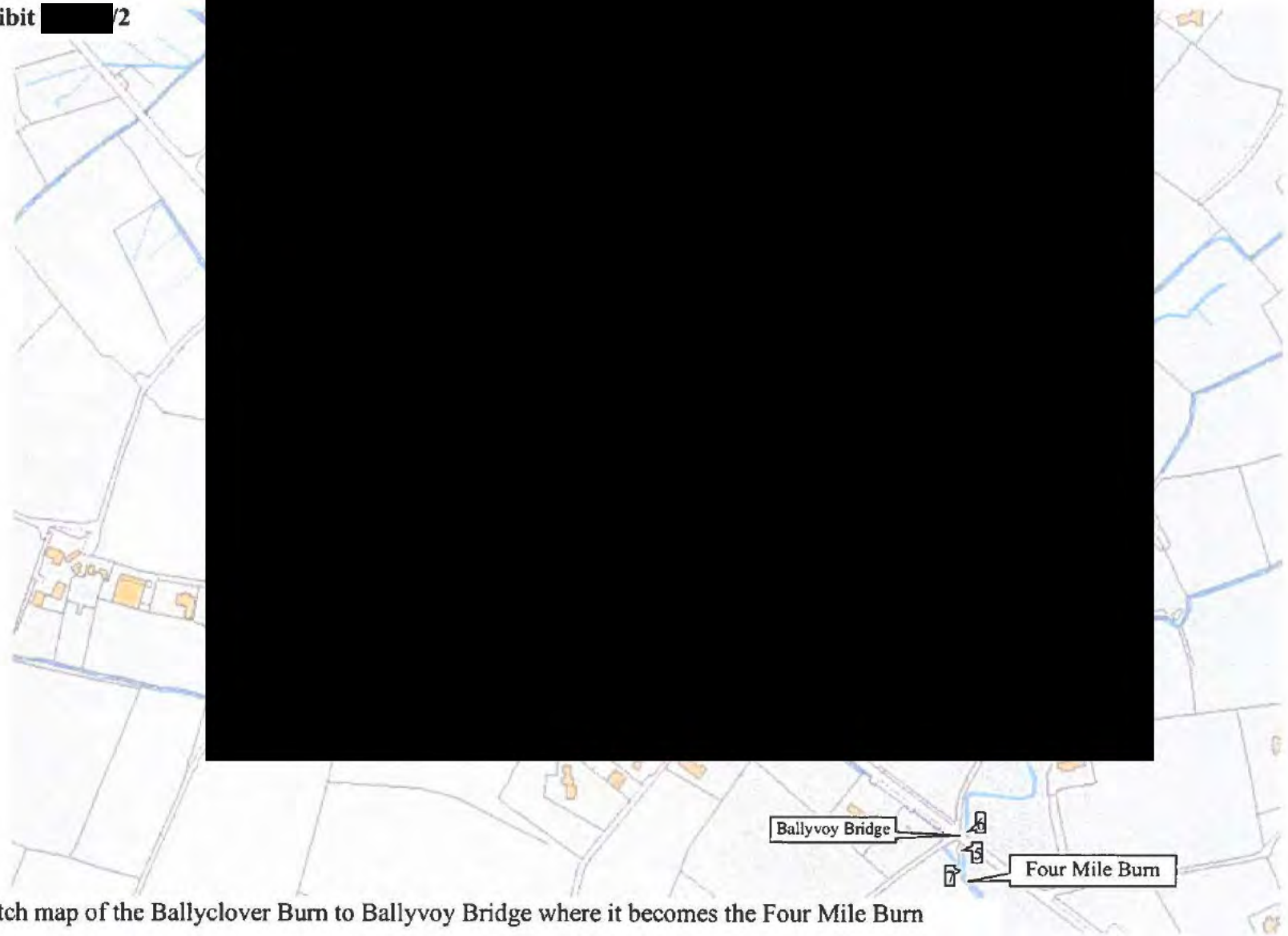
ID MARK.	DESCRIPTION	PRODUCED BY	HELD BY/ ON FILE	Page No (s)
Person 1/35d	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35e	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35f	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35g	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/35h	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/i	Copy of photograph attached to email received from [Name Redacted] on 31 October 2024	Person 1	On File	1
Person 1/36a	Copy of email sent to [Name Redacted] (31/10/2024 13:24)	Person 1	On File	1
Person 1/36b	Copy of email from [Name Redacted] (31/10/2024 13:27)	Person 1	On File	1
Person 8j	An assessment of carcass counting surveys with increasing time lapse following a simulated fish kill on a small upland stream	Person 8	On File	6





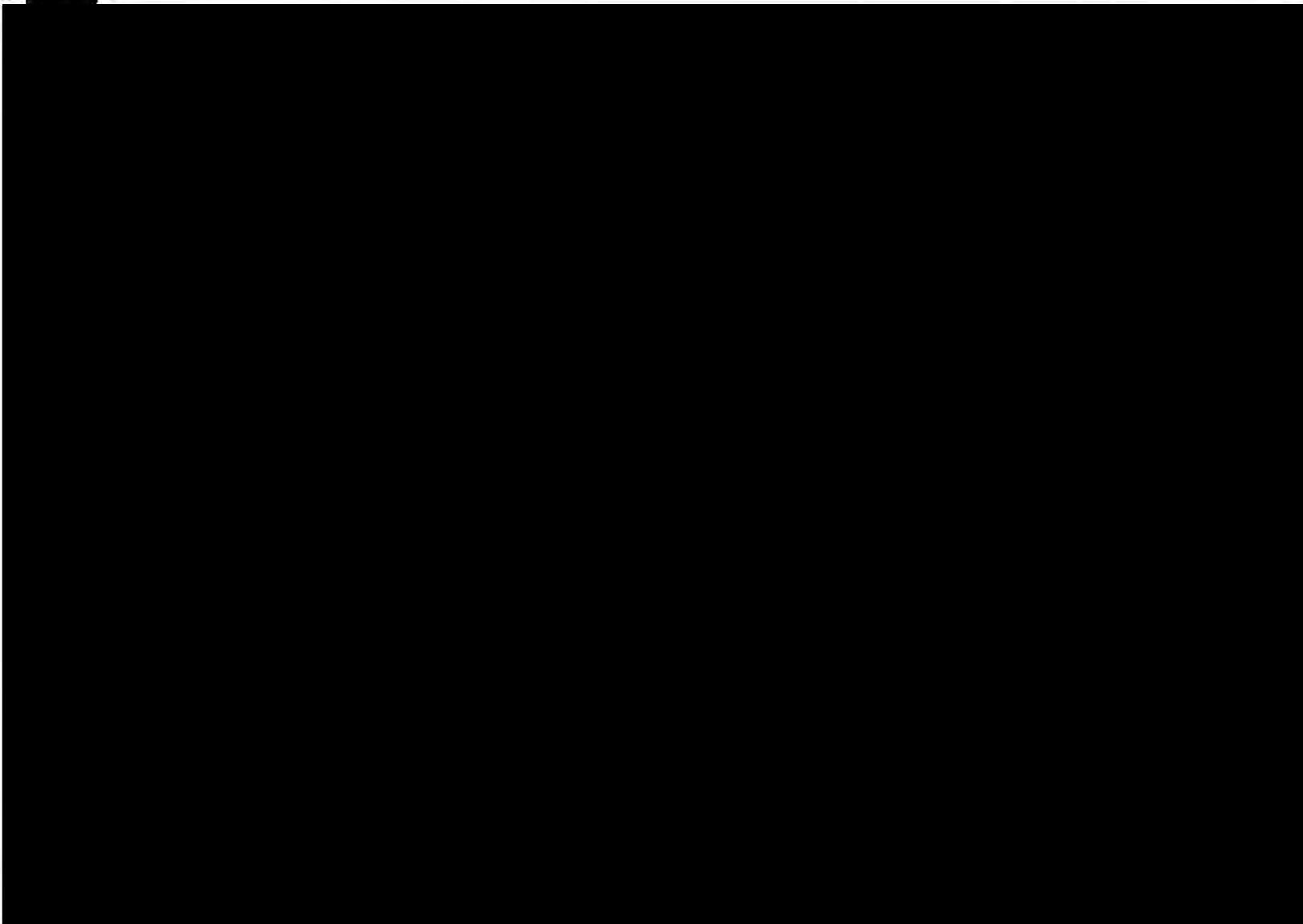
Sketch map of the Ballyclover Burn and Four Mile Burn.

Exhibit [redacted] 2



Sketch map of the Ballyclover Burn to Ballyvoy Bridge where it becomes the Four Mile Burn

Exhibit Person 1/3



Orthophotograph of the farm at [Address Redacted] Doagh.

Exhibit **Person 1**/4



Four Mile Burn visually clean and no dead fish observed

Date taken: 18 May 2024
Taken by: **Person 1**
Incident No: WR3/24/0504

Exhibit Person 1/5



Dead fish in Four Mile Burn (immediately downstream of Ballyvoy Bridge)

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit **Person 1**/6



Dead fish in Ballyclover Burn (immediately upstream of Ballyvoy Bridge)

Date taken: 18 May 2024
Taken by: **Person 1**
Incident No: WR3/24/0504

Exhibit Person 1/7



Dead macroinvertebrates in Four Mile Burn (immediately downstream of Ballyvoy Bridge)

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/8



Dead fish in Ballyclover Burn

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/9



Dead fish in Ballyclover Burn

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504



Dead fish in Ballyclover Burn

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504



Pipe actively discharging weak dilute slurry to the Ballyclover Burn at [REDACTED]
Statutory sample WR3/24/0504 was collected from this location.

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504



Flow of green coloured agricultural effluent through inspection chamber in Field [Redacted] at [Address Redacted]. Statutory sample WR3/24/0504B was collected from this location.

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504



Dried slurry on the slats of the below ground slurry store.

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504



Inspection chamber adjacent to slurry tank.

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1 15



Inspection chamber adjacent to slurry tank.

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/16



Drain tracing dye in inspection chamber in [REDACTED]

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/17



Drain tracing dye actively discharging to the Ballyclover Burn at [REDACTED]

Date taken: 18 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Transcript of Interview with [Name Redacted], recorded by hand, on 18 May 2024, at
[Address Redacted], by Person 1 NIEA

At 1547 hours, I read the caution to [Name Redacted] as written on my Warrant Card (EMFG 091) as follows: "You do not have to say anything, but I must caution you that if you do not mention when questioned something which you later rely on in court, it may harm your defence. If you do say anything it may be given in evidence". I asked [Name Redacted] if [Name Redacted] understood the caution and [Name Redacted] answered "Yes". I informed [Name Redacted] that: "You are not under arrest and are not obliged to remain with me. You may obtain legal advice if you so wish". I made contemporaneous notes of the subsequent interview in my NIEA issued notebook [Name Redacted] Person 2 [Name Redacted] was present during the interview.

Person 1 Can you state your full name, address and date of birth please?
[Name Redacted] [Name Redacted], [Address Redacted]
[Name Redacted]

Person 1 Are you the owner of the farm here?
[Name Redacted] Yes.

Person 1 The sole owner?
[Name Redacted] Yes. You could call it that.

Person 1 Tell me about the slurry you moved into the tank beside the
[Name Redacted] meal bin.

[Name Redacted] I still have a large number of cattle housed. We are preparing to put in/harvest silage on Monday, which will then be slurried. As in the ground will be slurried. After the silage is taken off. Yesterday, as two of the tanks below the cattle were full, I removed three loads from each tank and put them into the storage tank..

Person 1 Is that the tank beside the meal bin?
[Name Redacted] Yes.

Person 1 Please continue.

Exhibit [Redacted] 18, Page 2 of 2

[Name Redacted]

I didn't realise that there was any issue until today when I was approached by two member of the NIEA.

Person 1

What actions did you take to stop the discharge?

[Name Redacted]

After identifying the problem along with the NIEA personnel, we came to the conclusion that the leak originated from my store tank. I then shifted livestock off fields. I then proceeded to remove slurry from the tank until the offending flow stopped. Or the offending leakage stopped.

Person 1

How many loads did you remove?

[Name Redacted]

So far I have taken 4 out and the 5th is in the tanker. I do intend removing more and will provide evidence of the leak being stopped.

Person 1

What other actions do you propose undertaking to prevent this happening again?

[Name Redacted]

As soon as the tank is emptied, we will conduct a thorough inspection to establish where the leak came from and it will be repaired.

Person 1

Is there anything else you would like to add?

[Name Redacted]

it wasn't intentional by all means.

Interview concluded at 1601 hours. [Name Redacted] declined to have the notes of the interview read back.

Exhibit Person 1/19



Inspection chamber in Field [REDACTED]

Date taken: 21 May 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/20



Inspection chamber in Field [REDACTED]

Date taken: 11 June 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/21



Level of the slurry very near the bottom of the store.

Date taken: 11 June 2024
Taken by: Person 1
Incident No: WR3/24/0504

Exhibit Person 1/22



Liquids in bottom of inspection chamber adjacent to meal bin visually clean.

Date taken: 11 June 2024
Taken by: Person 1
Incident No: WR3/24/0504

Person 1

From: [Name Redacted] Redacted >
Sent: 27 June 2024 00:27
To: Person 1
Subject: [Name Redacted] Tank leak
Attachments: 20240626_213253.heic; 20240626_220936.heic; 20240626_222703.heic; 20240626_222714.heic; 20240626_222727.heic; 20240626_222802.heic; 20240626_222810.heic; 20240626_222856.heic; 20240626_223041.heic

CAUTION This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Hello Person 1

I hope this finds you well.

I am sending you this email with some additional information in regards to your proposed visit on 27th June with Person 2

I excavated the area at the back of the tank where the pumping main enters the tank through the concrete wall and unfortunately our suspicions are correct and there has been an underground leak at this point. The bond between the pipe and wall has broken down and there is evidence of liquid escape, this is evident below the pipe starting about 15 inches from the top of the tank. I have included photos taken before, during and after the excavation. More excavation will be required before a repair is made but I have stopped until you and Person 2 can inspect the fault as the dampness on the wall is still present and any further work will remove evidence.

After inspection it is my intention to remove the failed joint and have repaired to required standard, I have taken professional advice on this and a product called 'HyperSeal' is to be used per manufacturers instructions.

Please find enclosed photos of the works carried out to date.

Regards

[Name Redacted]

Email received from [Name Redacted] on 27 Jun e2024 at 0027 hours.

Exhibit Person 1/24a



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24b



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24c



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24d



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24e



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24f



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24g



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24h



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Exhibit Person 1/24i



Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours.

Person 1

From: Person 1
Sent: 27 June 2024 09:39
To: [Name Redacted]
Subject: RE: [Name Redacted] Tank leak

Good morning [Name Redacted]

Thank you for the email below and for the pictures attached

[Person 2] and I will see you around 1500 today

Cheers

Person 1

From: [Name Redacted] [Redacted] >
Sent: Thursday, June 27, 2024 12:27 AM
To: Person 1 [Redacted]
Subject: [Name Redacted] Tank leak

CAUTION - This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Hello Person 1

I hope this finds you well.

I am sending you this email with some additional information in regards to your proposed visit on 27th June with Person 2.

I excavated the area at the back of the tank where the pumping main enters the tank through the concrete wall and unfortunately our suspicions are correct and there has been an underground leak at this point.

The bond between the pipe and wall has broken down and there is evidence of liquid escape, this is evident below the pipe starting about 15 inches from the top of the tank. I have included photos taken before, during and after the excavation. More excavation will be required before a repair is made but I have stopped until you and Person 2 can inspect the fault as the dampness on the wall is still present and any further work will remove evidence.

After inspection it is my intention to remove the failed joint and have repaired to required standard, I have taken professional advice on this and a product called 'HyperSeal' is to be used per manufacturers instructions.

Please find enclosed photos of the works carried out to date.

Regards

[Name Redacted]

Reply to email received from [Name Redacted] on 27 June 2024.

Exhibit Person 1/26



Recently exposed return nozzle with dark staining on the outer wall of the slurry store.

Date taken: 27 June 2024
Taken by: Person 1
Incident No: WR3/24/0504



No staining on the other slurry store walls at the unused high level inlet pipes.

Date taken: 27 June 2024
Taken by: Person 1
Incident No: WR3/24/0504



Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency

WR3/24/0708

[Name Redacted]

[Address Redacted]

16 July 2024

Water Management Unit

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Telephone: [Redacted]

Email: [Redacted]

Dear Sir

WATER (NORTHERN IRELAND) ORDER 1999

On 18 May 2024, Northern Ireland Environment Agency (NIEA) investigated a report of dead fish in the Ballyclover Burn / Four Mile Burn at and downstream of Ballymena Road, Doagh. The NIEA Inspectors followed the dead fish carcasses in an upstream direction and discovered an actively discharging drainage pipe, which in turn was traced to your farm at [Address Redacted]. On arrival, the NIEA inspectors met with yourself and carried out an inspection of the farm, including a below ground slurry store. An inspection chamber in Field [Redacted] was opened and green coloured slurry was observed flowing through this chamber.

At 1400 hours, on 18 May 2024, a tripartite statutory sample of this flow of slurry was collected. This sample was accorded the unique reference number WR3/24/0504B. An initial tripartite statutory sample of the active discharge to the Ballyclover Burn from the drainage pipe was collected earlier at 1240 hours and this was accorded the unique reference number WR3/24/0504. A dye test demonstrated continuity between these two sampled locations. You subsequently were offered and selected and retained one portion each of both tripartite statutory samples.

Sustainability at the heart of a living, working, active landscape valued by everyone



Department of Agriculture,
Environment
and Rural Affairs

Gníomhaireacht Comhshaoil
agus Gníomhaireacht
Tuaisceart Éireann

Department of Agriculture,
Environment
and Rural Affairs

INVESTORS IN PEOPLE
We invest in people

Copy of Postal Caution sent to [Name Redacted] via recorded delivery

At 1547 hours, on 18 May 2024, you were cautioned and made aware of your rights under PACE (Police And Criminal Evidence Act). You made a statement at that time outlining what actions you initially undertook to mitigate the discharge of slurry. A transcript of this interview is included for your convenience. Subsequent inspections by NIEA were conducted on 21 May 2024 and on 11 June 2024. During a further inspection on 27 June 2024, you agreed to provide a written statement outlining the remedial works which you have undertaken in respect of the below ground slurry store.

I am now writing to you to offer you the opportunity to make a written statement regarding this pollution incident. However, I must caution you that:

"You do not have to say anything but I must caution you that if you do not mention when questioned something which you later rely on in court, it may harm your defence. If you do say anything it may be given in evidence."

You may obtain legal advice if you so wish. If you have any such statement to make, I would ask that this is made within 28 days of the date on this letter. If, within 28 days of the date of this letter, I have not received any correspondence from you, I will assume that you do not wish to make any statement on the matter.

If you wish to make a statement in writing, you should start it with the following:-

"I make this statement of my own free will. I understand that I need not say anything and that what I do say may be given in evidence. I also understand that if I fail to mention any fact which I may rely upon in my defence in court, my failure to mention it now may harm my defence. I have been advised that I may seek legal advice if I so wish".

Any written statement, which should be signed and dated, should be sent to me at the address on this letter. If you do wish to make a written statement, I would invite you to answer the following questions and provide the following information:

Sustainability at the heart of a living, working, active landscape valued by everyone



The Agency within the Department of
Agriculture, Environment
and Rural Affairs

Comhairle na nEagraíochtaí
Tabairneachta, Comh-sháil
agus Gnóthaí Tíre

The Agency within the Department of
Agriculture, Environment
and Rural Affairs

INVESTORS IN PEOPLE
We invest in people

Copy of Postal Caution sent to [Name Redacted] via recorded delivery

1. Your full name, address and date of birth.
2. Confirmation that you are the owner and operator of the farm business at [Address Redacted]
3. In respect of the below ground slurry store, please provide the following:
 - a. any background information you deem relevant in respect of the construction and specification of the below ground slurry store
 - b. the purpose of the below ground slurry store, including what slurries / effluents are stored therein
 - c. Details of other slurry and /or silage effluent storage tanks on the farm
4. What action(s) / repair(s) / measure(s) have you, those directed by you, or those employed by you, taken to prevent further discharges from the below ground slurry store?
5. Any other information or comments which you wish to provide with regard to this matter.

Please provide answers to the above questions and any information requested, noting that where information is not forwarded, then under the terms of the caution issued "if you do not mention when questioned something which you later rely on in court, it may harm your defence".

Yours faithfully,

Person 1

Person 1

Water Quality Inspector

Sustainability at the heart of a living, working, active landscape valued by everyone



Department of
Agriculture, Environment
and Rural Affairs

Department of
Talmhaíochtaí, Coimhearsaíocht
agus Grádhál Tuáilte

Department of
Tairníocht, Timpeallacht
agus Cintrín Matúir

INVESTORS IN PEOPLE
We invest in people

Copy of Postal Caution sent to [Name Redacted] via recorded delivery

Transcript of interview with Mr [Name Redacted] recorded by hand, on 18 May 2024, at [Address Redacted] by Person 1, NIEA

At 1547 hours, I read the caution to [Name Redacted] as written on my Warrant Card (EMFG 091) as follows: "You do not have to say anything, but I must caution you that if you do not mention when questioned something which you later rely on in court, it may harm your defence. If you do say anything it may be given in evidence". I asked [Name Redacted] if [Name Redacted] understood the caution and [Name Redacted] answered "Yes". I informed [Name Redacted] that "You are not under arrest and are not obliged to remain with me. You may obtain legal advice if you so wish". I made contemporaneous notes of the subsequent interview in my NIEA issued notebooks [Name Redacted] Person 2 [Name Redacted] was present during the interview.

Person 1: Can you state your full name, address and date of birth please?
[Name Redacted]: [Name Redacted], [Address Redacted]
[Name Redacted]

Person 1: Are you the owner of the farm here?
[Name Redacted]: Yes.

Person 1: The sole owner?
[Name Redacted]: Yes. You could call it that.

Person 1: Tell me about the slurry you moved into the tank beside the meal bin.
[Name Redacted]: I still have a large number of cattle housed. We are preparing to put in/harvest silage on Monday, which will then be slurried. As in the ground will be slurried. After the silage is taken off. Yesterday, as two of the tanks below the cattle were full, I removed three loads from each tank and put them into the storage tank..

Person 1: Is that the tank beside the meal bin?
[Name Redacted]: Yes.

Person 1: Please continue.
[Name Redacted]: I didn't realise that there was any issue until today when I was approached by two member of the NIEA.

Person 1: What actions did you take to stop the discharge?

WR3/24/0504

Page 2 of 2

[Name Redacted]

After identifying the problem along with the NIEA personnel, we came to the conclusion that the leak originated from my store tank. I then shifted livestock off fields. I then proceeded to remove slurry from the tank until the offending flow stopped. Or the offending leakage stopped.

Person 1

How many loads did you remove?

[Name Redacted]

So far I have taken 4 out and the 5th is in the tanker. I do intend removing more and will provide evidence of the leak being stopped.

Person 1

What other actions do you propose undertaking to prevent this happening again?

[Name Redacted]

As soon as the tank is emptied, we will conduct a thorough inspection to establish where the leak came from and it will be repaired.

Person 1

Is there anything else you would like to add?

[Name Redacted]

it wasn't intentional by all means.

Interview concluded at 1601 hours. [Name Redacted] declined to have the notes of the interview read back.

Exhibit Person 1/29a

Post Office Ltd.
CERTIFICATE OF POSTING

Toomebridge
52-66 Main Street
Toomebridge
Antrim
County Antrim
BT41 3NJ

Posting date: 16/07/2024 13:52
Session ID: 1-402660
After last acceptance time? N

Destination Country UK (EU)
Address Validated? N
Signed For 1st £3.05
Letter
Weight 0.033 kg

Reference number

Building Name or Number Postcode
(Address Redacted) (Address Redacted)

Delivery aim: next working day. Proof of
delivery and signature at royalmail.com.

PLEASE REFER TO SEPARATE TERMS AND
CONDITIONS

For information about Royal Mail services,
please visit www.royalmail.com

PLEASE RETAIN AS YOUR PROOF OF POSTING
this is not a financial receipt
Thank you

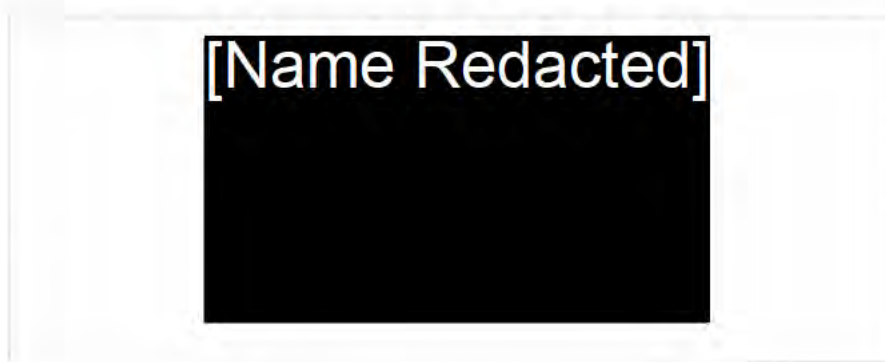
Copy of Proof of Certificate of Posting of Postal Caution sent to [Name Redacted] on
16 July 2024



Track your Item

Proof of delivery

Tracking number: [Redacted]



Your item was delivered on 17-07-2024.

Signed for by: [Name Redacted]

Service used: Royal Mail Signed For™

Delivered at: 11:05, Wednesday 17 July 2024

Copy of Proof of Delivery of Postal Caution sent to [Name Redacted] on 16 July 2024.



Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Northern Ireland Environment Agency

WR3/24/0708

[Name Redacted]
[Address Redacted]

Water Management Unit

[Redacted]
[Redacted]
[Redacted]
[Redacted]
Telephone: [Redacted]
Email: [Redacted]

By email [Redacted]

05 September 2024

Dear Sir

WATER (NORTHERN IRELAND) ORDER 1999

Further to my letter dated 16 July and to my visit with yourself on 4 September 2024.

On 18 May 2024, Northern Ireland Environment Agency (NIEA) investigated a report of dead fish in the Ballyclover Burn / Four Mile Burn at and downstream of Ballymena Road, Doagh. The NIEA Inspectors followed the dead fish carcasses in an upstream direction and discovered an actively discharging drainage pipe, which in turn was traced to your farm at [Address Redacted]. On arrival, the NIEA inspectors met with yourself and carried out an inspection of the farm, including a below ground slurry store. An inspection chamber in Field [Redacted] was opened and green coloured slurry was observed flowing through this chamber.

At 1400 hours, on 18 May 2024, a tripartite statutory sample of this flow of slurry was collected. This sample was accorded the unique reference number WR3/24/0504B. An initial tripartite statutory sample of the active discharge to the Ballyclover Burn from the drainage pipe was collected earlier at 1240 hours and this was accorded the unique reference number WR3/24/0504. A dye test demonstrated continuity between these two

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Copy of second Postal Caution sent to [Name Redacted] by email

sampled locations. You subsequently were offered and selected and retained one portion each of both tripartite statutory samples.

At 1547 hours on 18 May 2024, you were cautioned and made aware of your rights under PACE (Police And Criminal Evidence Act). You made a statement at that time outlining what actions you initially undertook to mitigate the discharge of slurry. A transcript of this interview is included for your convenience. Subsequent inspections by NIEA were conducted on 21 May 2024 and on 11 June 2024. During a further inspection on 27 June 2024, you agreed to provide a written statement outlining the remedial works which you have undertaken in respect of the below ground slurry store.

I am now writing to you to offer you the opportunity to make a written statement regarding this pollution incident. However, I must caution you that

"You do not have to say anything but I must caution you that if you do not mention when questioned something which you later rely on in court, it may harm your defence. If you do say anything it may be given in evidence."

You may obtain legal advice if you so wish. If you have any such statement to make, I would ask that this is made within 28 days of the date on this letter. If, within 28 days of the date of this letter, I have not received any correspondence from you, I will assume that you do not wish to make any statement on the matter.

If you wish to make a statement in writing, you should start it with the following:-

"I make this statement of my own free will, I understand that I need not say anything and that what I do say may be given in evidence. I also understand that if I fail to mention any fact which I may rely upon in my defence in court, my failure to mention it now may harm my defence. I have been advised that I may seek legal advice if I so wish".

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Department of Agriculture, Environment and Rural Affairs

Department of Agriculture, Environment and Rural Affairs

Department of Agriculture, Environment and Rural Affairs

INVESTORS IN PEOPLE
We invest in people

Copy of second Postal Caution sent to [Name Redacted] by email

Any written statement, which should be signed and dated, should be sent to me at the address on this letter. If you do wish to make a written statement, I would invite you to answer the following questions and provide the following information:

1. Your full name, address and date of birth.
2. Confirmation that you are the owner and operator of the farm business at [Address Redacted].
3. In respect of the below ground slurry store, please provide the following:
 - a. any background information you deem relevant in respect of the construction and specification of the below ground slurry store.
 - b. the purpose of the below ground slurry store, including what slurries / effluents are stored therein.
 - c. Details of other slurry and /or sludge effluent storage tanks on the farm.
4. What action(s) / repair(s) / measure(s) have you, those directed by you, or those employed by you, taken to prevent further discharges from the below ground slurry store?
5. Any other information or comments which you wish to provide with regard to this matter.

Please provide answers to the above questions and any information requested, noting that where information is not forwarded, then under the terms of the caution issued "if you do not mention when questioned something which you later rely on in court, it may harm your defence".

Yours faithfully,

Person 1

Water Quality Inspector

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Department of Agriculture, Environment and Rural Affairs

Teachtóir, Ceolshaoil agus Gnóthaí Tuairte

Department of the Environment, Food and Rural Affairs

INVESTORS IN PEOPLE
We invest in people and the future

Copy of second Postal Caution sent to [Name Redacted] by email

Transcript of Interview with [Name Redacted], recorded by hand, on 18 May 2024, at [Address Redacted], by Person 1, NIEA

At 1547 hours, I read the caution to [Name Redacted] as written on my Warrant Card (EMFG 091) as follows: "You do not have to say anything, but I must caution you that if you do not mention when questioned something which you later rely on in court, it may harm your defence. If you do say anything it may be given in evidence". I asked [Name Redacted] if he understood the caution and [Name Redacted] answered "Yes". I informed [Name Redacted] that: "You are not under arrest and are not obliged to remain with me. You may obtain legal advice if you so wish". I made contemporaneous notes of the subsequent interview in my NIEA issued notebooks [Name Redacted]. Person 2 was present during the interview.

Person 1: Can you state your full name, address and date of birth please?
[Name Redacted]: [Name Redacted], [Address Redacted], [Name Redacted]

Person 1: Are you the owner of the farm here?
[Name Redacted]: Yes.

Person 1: The sole owner?
[Name Redacted]: Yes. You could call it that.

Person 1: Tell me about the slurry you moved into the tank beside the meal bin.

[Name Redacted]: I still have a large number of cattle housed. We are preparing to put in harvest silage on Monday, which will then be slurried. As in the ground will be slurried. After the silage is taken off. Yesterday, as two of the tanks below the cattle were full, I removed three loads from each tank and put them into the storage tank.

Person 1: Is that the tank beside the meal bin?
[Name Redacted]: Yes.

Person 1: Please continue.
[Name Redacted]: I didn't realise that there was any issue until today when I was approached by two member of the NIEA.

Person 1: What actions did you take to stop the discharge?

WR3240504

Page 2 of 2

[Name Redacted]

After identifying the problem along with the NIEA personnel, we came to the conclusion that the leak originated from my store tank. I then shifted livestock off fields. I then proceeded to remove slurry from the tank until the offending flow stopped. Or the offending leakage stopped.

Person 1

How many loads did you remove?

[Name Redacted]

So far I have taken 4 out and the 5th is in the tanker. I do intend removing more and will provide evidence of the leak being stopped.

Person 1

What other actions do you propose undertaking to prevent this happening again?

[Name Redacted]

As soon as the tank is emptied, we will conduct a thorough inspection to establish where the leak came from and it will be repaired.

Person 1

Is there anything else you would like to add?

[Name Redacted]

it wasn't intentional by all means.

Interview concluded at 1601 hours. [Name Redacted] declined to have the notes of the interview read back.

Copy of second Postal Caution sent to [Name Redacted] by email

Person 1

From: Person 1
Sent: 05 September 2024 12:23
To: [Name Redacted]
Subject: NIEA reference WR3/24/0504
Attachments: [Name Redacted] Postal Caution 05-09-2024.pdf

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution incident WR3/24/0504 on 18 May 2024

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency

Redacted

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Northern Ireland Environment Agency
Ombudsmaireacht Ghnóthaíocht Tuaisceart Éireann
Niúlaí An-tuairim Éireann



Agriculture, Environment
and Rural Affairs

Tábhachtacha, Comhionann
agus Ceolmáirí Tuairim

Ag éirí ar a chéim
Tábhachtacha, Comhionann
agus Ceolmáirí Tuairim

From: Person 1
Sent: Thursday, June 27, 2024 9:39 AM
To: [Name Redacted] <[Redacted]>
Subject: RE: [Name Redacted] Tank leak

Good morning [Name Redacted]

Thank you for the email below and for the pictures attached

[Person 2] and I will see you around 1500 today.

Cheers

Person 1

From: [Name Redacted] <[Redacted]>
Sent: Thursday, June 27, 2024 12:27 AM
To: Person 1 <[Redacted]>
Subject: [Name Redacted] Tank leak

Copy of email sent to [Name Redacted], attached to which was a second Postal Caution

Person 1

From: [Name Redacted] Redacted
Sent: 05 September 2024 13:56
To: Person 1
Subject: Re: NIEA reference WR3/24/0504

CAUTION - This email has been received from outside the NICS network. If you have any concerns please report for investigation

Hello Person 1
Thanks for the visit yesterday and today's email. I will gather together an account of what happened prior to and after the unfortunate event. I will endeavour to get this to you in the next fortnight. I hope you deem this satisfactory.

Regards
[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] Redacted
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution incident WR3/24/0504 on 18 May 2024

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency
[Redacted]
Redacted



From: Person 1
Sent: Thursday, June 27, 2024 9:39 AM
To: [Name Redacted] Redacted
Subject: RE: [Redacted] Tank leak

Person 1

From: [Name Redacted] Redacted
Sent: 23 September 2024 09:01
To: Person 1
Subject: Re: NIEA reference WR3/24/0504

CAUTION – This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Morning Person 1

Have started the remedial works on the offending pipe am going to install an inspection lid for future reference which will be concreted in. The good weather has taken me away from this project as I try to get farm jobs up to date but will get it finished and an account of it all sent to you by the end of the week.

Regards
[Name Redacted]

Sent from Outlook for Android

From: [Name Redacted] Redacted
Sent: Thursday, September 5, 2024 1:56:18 PM
To: Person 1 Redacted
Subject: Re: NIEA reference WR3/24/0504

Hello Person 1

Thanks for the visit yesterday and today's email. I will gather together an account of what happened prior to and after the unfortunate event. I will endeavour to get this to you in the next fortnight. I hope you deem this satisfactory.

Regards
[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] Redacted
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution incident WR3/24/0504 on 18 May 2024.

Many regards

Person 1

Person 1
Water Quality Inspector

Exhibit Person 1/33b

Person 1

From: Person 1
Sent: 23 September 2024 13:37
To: [Name Redacted]
Subject: RE: NIEA reference WR3/24/0504

Thanks for the update [Name Redacted]

Many regards

Person 1

From: [Name Redacted] <[Redacted]>
Sent: Monday, September 23, 2024 9:01 AM
To: Person 1 [Redacted]
Subject: Re: NIEA reference WR3/24/0504

CAUTION – This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Morning Person 1

Have started the remedial works on the offending pipe am going to install an inspection lid for future reference which will be concreted in. The good weather has taken me away from this project as I try to get farm jobs up to date but will get it finished and an account of it all sent to you by the end of the week.

Regards

[Name Redacted]

Sent from Outlook for Android

From: [Name Redacted] <[Redacted]>
Sent: Thursday, September 5, 2024 1:56:18 PM
To: Person 1 [Redacted]
Subject: Re: NIEA reference WR3/24/0504

Hello Person 1

Thanks for the visit yesterday and today's email. I will gather together an account of what happened prior to and after the unfortunate event. I will endeavour to get this to you in the next fortnight. I hope you deem this satisfactory.

Regards

[Name Redacted]

Sent from Outlook for Android

From: Person 1 [Redacted]
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] [Redacted]
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

Copy of email to [Name Redacted]

Exhibit Person 1/33c

Person 1

From: [Name Redacted] Redacted
Sent: 02 October 2024 14:39
To: Person 1
Subject: Re: NIEA reference WR3/24/0504

CAUTION – This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Hello

Final piece of repair being done on Friday (concreting pipe in place and construction of inspection chamber).

Pictures and full account will then follow.

Regards

[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] Redacted
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution Incident WR3/24/0504 on 18 May 2024.

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency

[Redacted]

Sustainability of the forest is a living, working, active landscape valued by everyone.



Northern Ireland Environment Agency
Gníomhaíocht Comhábalaíocht, Tuisceán agus Eolas
Northern Ireland Environment Agency



Department of Agriculture,
Environment and Rural Affairs

Department of the Environment,
Tourism, Culture and Heritage
Taiscéalacha, Cultúr agus
Gníomhaíocht

Department of the Environment,
Climate, Environment and
Water Management
Gníomhaíocht, Aeráid, Aeráid agus
Uisce

From: Person 1
Sent: Thursday, June 27, 2024 9:39 AM
To: [Name Redacted] Redacted
Subject: RE: [Name Redacted] Tank leak

Copy of email from [Name Redacted]

Person 1

From: Person 1
Sent: 03 October 2024 10:08
To: [Name Redacted]
Subject: RE: NIEA reference WR3/24/0504

Thanks for the update [Name Redacted]

Many regards

Person 1

From: [Name Redacted] Redacted
Sent: Wednesday, October 2, 2024 2:39 PM
To: [Name Redacted] Pe Redacted
Subject: Re: NIEA reference WR3/24/0504

CAUTION - This email has been received from outside the NICS network. If you have any concerns, please report for investigation

Hello

Final piece of repair being done on Friday (concreting pipe in place and construction of inspection chamber).

Pictures and full account will then follow.

Regards

[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] Redacted
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution incident WR3/24/0504 on 18 May 2024

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency

Redacted

Person 1

From: [Name Redacted] Redacted
Sent: 09 October 2024 00:21
To: Person 1
Subject: Re: NIEA reference WR3/24/0504

CAUTION – This email has been received from outside the NICS network. If you have any concerns please report for investigation

Person 1,
Repairs all finished.
Will have pictures and an account of events as soon as possible.
[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, October 3, 2024 10:08:20 AM
To: [Name Redacted] Redacted
Subject: RE: NIEA reference WR3/24/0504

Thanks for the update [Name Redacted]

Many regards

Person 1

From: [Name Redacted] Redacted
Sent: Wednesday, October 2, 2024 2:39 PM
To: Person 1 Redacted
Subject: Re: NIEA reference WR3/24/0504

Hello
Final piece of repair being done on Friday (concreting pipe in place and construction of inspection chamber).
Pictures and full account will then follow.
Regards
[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, September 5, 2024 12:22:30 PM
To: [Name Redacted] Redacted
Subject: NIEA reference WR3/24/0504

Hello [Name Redacted]

As discussed yesterday, please find attached letter for your attention re water pollution incident WR3/24/0504 on 18 May 2024

Person 1

From: Person 1
Sent: 09 October 2024 11:40
To: [Name Redacted]
Subject: RE: NIEA reference WR3/24/0504

Thank you [Name Redacted]

Person 1

From: [Name Redacted] Redacted
Sent: Wednesday, October 9, 2024 12:21 AM
To: Person 1 Redacted
Subject: Re: NIEA reference WR3/24/0504

CAUTION – This email has been received from outside the NICS network. If you have any concerns, please report for investigation.

Person 1

Repairs all finished.
Will have pictures and an account of events as soon as possible.
[Name Redacted]

Sent from [Outlook for Android](#)

From: Person 1 Redacted
Sent: Thursday, October 3, 2024 10:08:20 AM
To: [Name Redacted] Redacted
Subject: RE: NIEA reference WR3/24/0504

Thanks for the update [Name Redacted]

Many regards

Person 1

From: [Name Redacted] Redacted
Sent: Wednesday, October 2, 2024 2:39 PM
To: Person 1 Redacted
Subject: Re: NIEA reference WR3/24/0504

Hello
Final piece of repair being done on Friday (concreting pipe in place and construction of inspection chamber).
Pictures and full account will then follow.
Regards
[Name Redacted]

Sent from Outlook for Android

Person 1

From: [Name Redacted] Redacted
Sent: 31 October 2024 13:01
To: Person 1
Subject: [Name Redacted] River leak.
Attachments: PHONE PHOTOS 31 OCT 2024 2713.jpg; PHONE PHOTOS 31 OCT 2024 2715.jpg;
PHONE PHOTOS 31 OCT 2024 2721.jpg; PHONE PHOTOS 31 OCT 2024 2734.jpg;
PHONE PHOTOS 31 OCT 2024 2737.jpg; PHONE PHOTOS 31 OCT 2024 2771.jpg;
PHONE PHOTOS 31 OCT 2024 3077.jpg; PHONE PHOTOS 31 OCT 2024 3079.jpg;
PHONE PHOTOS 31 OCT 2024 3147.jpg

CAUTION - This email has been received from outside the NICS network. If you have any concerns, please report for investigation

[Name Redacted]
[Address redacted]
[Redacted]

D.O.B. [Redacted]

I confirm that I am the owner of and am in control of and responsible for the farm and premises located at the above address.

On the morning of 16th May 2024 I shifted 6 (10,000 litres each) loads of slurry from existing slurry tanks into my store tank. The purpose of shifting the slurry from the tanks was to ensure they didn't over fill and impede on the cattle still housed on them. During the process of transferring the slurry I also agitated/mixed the storage tank for a few hours, this was in preparation for the spreading of slurry out of that store tank on land that was due to be cleared of silage on the 20th May. During this process there was foaming of the slurry and severe disruption of the slurry due to the agitation and the tank was full as it was 12 inches (300mm) off the bottom of the slats which is the necessary 'freeboard' required. When I was finished nothing appeared to be wrong or different and I had no concerns.

After lunch on the 18th May 2024 I was approached in my yard by two members of NIEA staff Person [Redacted] and Person 2 who informed me that there was a spillage in the Ballyclover Burn adjacent to my farm, there had been a fish kill and an outlet on my farm was the source of the pollution. I was stunned to hear this and we all immediately began to investigate the source of the leak. The drainage system on our premises is quite comprehensive and by investigation of the different manholes and inspection chambers and a dye test we soon came to the conclusion that the leak had come from my store tank but didn't seem to be actively leaking at that time but there was residual slurry trapped in the drainage stones around the field drains as no slurry appeared to be running in at one end but contaminated water was running out the other. I recounted to them my actions around the tank in the previous days and we all thought that somehow this had somehow caused the event so we were all of the opinion that removing some slurry from the tank would reduce the threat of a further leakage., from this we agreed that a removing slurry from the tank was the thing to do.

I immediately moved livestock around on fields to free up a suitable field to receive slurry and removed six loads of slurry from the tank and spread them on the field, this was all that was feasible to shift until land would be available after silage harvest.

Copy of email from [Name Redacted]

The NIEA staff seemed content with my actions, took a statement from me, outlined the process that we were now in and told me they would be returning to monitor the situation. At this point it was deemed there was no more we could do.

During the next few days I was monitoring the water flows in the chambers every six hours or so and no further pollution or leakage was seen, during this time I was studying the infrastructure of my tank and had a suspicion of where the leak may be originating.

Silage was harvested on 20th May 2024 and we started to empty the tank immediately afterwards, the tank was empty by the 22nd May.

NIEA staff visited numerous times during the following weeks to monitor the situation and were content that no further pollution was taking place. I stated that the tank would not be used until the problem was identified and corrected, I told them of my suspicions of where the leak had originated and arranged for the excavation of an area adjacent to the tank to examine a pipe, we also entered the tank and carried out a visual inspection. Through these actions we were able to pinpoint the source of the leak.

The tank was constructed in 2008 to full DAERA specs as part of the Nitrates Programme it measures 80 feet x 42 feet x 8 feet deep. It is used as an effluent catch tank for an adjacent silo and as a store tank for slurry during winter months, no livestock are penned on the tank. During construction of the tank a 'pumping main' was installed, this is a 150mm HDPE pipe (large watermain pipe) which starts at a point 1m above ground level at the front of the tank and runs down the outside of the tank and then enters through the tank wall and terminates in a reducing nozzle above the slurry. The purpose of this pipe is that when the tank is to be mixed the mixing pump is attached to this pipe and slurry is pumped down this pipe at high pressure and flow to the back of the tank through the reducing nozzle which produces a jet which circulates and mixes the slurry. This system of pipe was an option on the Nitrates Directive and was installed in the tank at time of construction.

The source of the leak was at the point where the HDPE (blue plastic) pipe went through the concrete wall the joint between the pipe and concrete had corroded away this has probably been caused by a combination of the corrosiveness of the slurry and the vibration in the pipe when slurry is being forced through it. The point of the leak was situated at about 15 inches (350mm) below the top of the tank wall so 2 inches (50mm) below the freeboard level. This is shown on attached photos.

I informed NIEA of my findings and they inspected it and I agreed to arrange repairs.

Due to the dangers of latent slurry gas remaining in the tank we waited as long as possible before making repairs to let the gases dissipate as we had to enter the tank to complete the repairs successfully.

The area around the pipe was thoroughly pressure washed, cleaned and inspected. We consulted with Moore Concrete about suitable course of action and they recommended removal of the damaged concrete around the pipe and the use of SQUDFLEX 40FC to seal the pipe into the wall.

This was carried out to manufacturers guidelines. We also reinstated the pipe using 1m³ (2.2 tons) of concrete connected to the outside of the tank wall using resin anchored rebars the purpose of this is to hold the pipe in place, stop vibration and ensure no strain is put on the seal between pipe and wall.

At the request of Person 2 a small inspection chamber was also constructed in the concrete benching so as we can monitor the seal in future as this was not able to be done previously.

I informed NIEA on 9th Oct 2024 that I had completed the repairs.

It is my opinion that the leak was caused by the breakdown/degradation of the seal between the pipe and the concrete wall this was made worse by the vibration in the mixing pipe and the violent movement of slurry during mixing.

In future during these operations we will be much more aware of what can happen and now that we are able to monitor the pipe we shall be able to keep track of what is going on. We will not use that mixing pipe in future if slurry level is within 8 inches 200mm of the bottom of the pipe / 20 inches (500mm) from top of wall.

We have been farming here since 1953 Person 2 BallyClover Burn and in that time, we have never had a pollution incident or knowingly discharged anything into a watercourse. As a farm we have won international sustainability awards and during our time as a Focus Farm we were used

Exhibit Person 1/34, Page 3 of 3

as an example farm for 'best practise' during the Farm Nitrates Scheme. On that day of the 16th of May I was stunned to be told that we had caused a pollution incident and extremely saddened to hear of the fish kill. To say that these events occurring on our farm is out of character is an understatement. It's an incredibly stressful situation to suddenly find yourself in and I hope never to be in that situation again.

As a footnote I have to add that regardless of whatever decision is made in my case by the NIEA the attitude and actions of Person 1 and Person 2 are to be commended. They came onto my premises in an official capacity to enforce the law and with bad news for me, putting me in a stressful position very quickly. Their attitude, calmness and eagerness to engage and find a workable solution quickly are qualities that is a credit to them both.

Yours Sincerely,
[Name Redacted]

Copy of email from [Name Redacted]

Exhibit Person 1/35a



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35b



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35c



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35d



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35e



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35f



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35g



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35h



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Exhibit Person 1/35i



Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1

From: Person 1
Sent: 31 October 2024 13:24
To: [Name Redacted]
Subject: RE: [Redacted] river leak.

Hello [Name Redacted]

Thank you for your email below.

I will include this in the file which will be passed to NIEA headquarters in the next couple of weeks.

If you have any questions, please do not hesitate to contact me.

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency

[Redacted]



From: [Name Redacted] [Redacted]
Sent: 31 October 2024 13:01
To: Person 1 [Redacted]
Subject: [Name Redacted] river leak.

CAUTION – This email has been received from outside the NICS network. If you have any concerns please report for investigation

[Name Redacted]
[Address Redacted]

D.O.B. [Redacted]

I confirm that I am the owner of and am in control of and responsible for the farm and premises located at the above address.

Person 1

From: [Name Redacted] Redacted
Sent: 31 October 2024 13:27
To: Person 1
Subject: Re: [Name Redacted] river leak.

CAUTION – This email has been received from outside the NICS network. If you have any concerns, please report to the investigation.

Person 1

Thanks for the reply.

[Name Redacted]

Sent from Outlook for Android

From: Person 1 Redacted
Sent: Thursday, October 31, 2024 1:24:27 PM
To: [Name Redacted] Redacted
Subject: RE: [Name Redacted] river leak.

Hello [Name Redacted]

Thank you for your email below.

I will include this in the file which will be passed to NIEA headquarters in the next couple of weeks.

If you have any questions, please do not hesitate to contact me.

Many regards

Person 1

Person 1
Water Quality Inspector
NI Environment Agency
[Redacted]
Redacted



From: [Name Redacted] Redacted
Sent: 31 October 2024 13:01
To: Person 1 Redacted
Subject: [Name Redacted] river leak.



An assessment of carcass counting surveys with increasing time lapse following a simulated fish kill on a small upland stream

R. J. Kennedy¹ | M. Allen¹ | R. Rosell¹ | A. Reid²

¹Agri-Food and Biosciences Institute, Belfast, UK

²Department of Agriculture, Environment & Rural Affairs, Inland Fisheries, Belfast, UK

Correspondence

Richard J. Kennedy, Agri-Food and Biosciences Institute, Belfast, UK
Email: Richard.kennedy@afbini.gov.uk

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Abstract

A simulated fish kill was conducted on a small upland stream in Northern Ireland by planting out hatchery-produced brown trout *Salmo trutta* L. carcasses of various size categories. Standard, post-fish kill, assessment walkover surveys were conducted over time intervals to determine the number of carcasses visible. The sample variance between individual surveyors was generally low, with good agreement between the observed counts for the three, discrete, size fractions of fish up to 72 hr after the simulated fish kill. Despite low discharge rates, shallow water and good accessibility to the experimental stream, only 52% of the small category fish (<8 cm L_p) were recorded 4 hr after the start of the simulated fish kill. Larger carcasses (>17 cm L_p) were more visible, and >90% were detected 48 hr after the start of the simulated fish kill. After 96 hr, all size fractions of carcasses had reduced significantly, and the variability between replicate surveys increased markedly.

KEYWORDS

brown trout, distribution, fish kill, mortality, stock assessment, visual survey

1 | INTRODUCTION

Determination of losses following a fish kill incident is an unfortunate necessity for modern fishery managers across the globe. In many cases, a post-fish kill investigation is undertaken to determine the cause, spatial extent and numbers of fish lost (American Fisheries Society, 1982; Brown, Morley, Sanderson & Tait, 1983). The assessment of mortalities after a fish kill incident can involve a variety of techniques, dependant on the scale and nature of the event as well as the type of water course impacted (Hill, 1983; Patterson, Skibo, Barnes, Hills & Macdonald, 2007). The most direct assessment, employed on streams and smaller water bodies, involves a walkover survey of the impacted water and a visual count and/or collection of fish carcasses (Meyer & Barclay, 1990). Extensive incidents may necessitate subsampling a portion of the affected areas to facilitate extrapolation of losses to the entire impacted area. Post-fish kill surveys can provide important information on the different fish species affected. Additionally, biological data collated from carcasses can yield information on the age classes of fish

killed and the likely subsequent impact of the incident on future productivity and recruitment (Kennedy, Rosell & Hayes, 2012). Post-fish kill investigations must be capable of accurately assessing the overall losses incurred by a fishery to provide a sound basis for subsequent compensation claims and mitigation actions. The relative paucity of scientific studies that evaluate potential investigatory methods or describe fish kill dynamics is a significant challenge to this management process. Fish kills are temporally and spatially unpredictable, and the undesirable losses thereof generally restricts the study of fish kill dynamics and subsequent recovery patterns to opportunistic investigations for which pre-kill baseline data are available (Kennedy et al., 2012; King, 2015). A review of fish kill related literature concluded that few studies have evaluated the different approaches for assessing mortality incidents and that more experimental work was urgently required, to improve understanding of fish kill dynamics and assessment (La & Cooke, 2011).

The accuracy of direct visual-count methods to determine the number of mortalities arising from a fish kill incident is dependent on a

range of environmental and biological factors. Fish can drift considerable distances downstream after they have died in a river (Havn et al., 2017), and an increase in discharge rate may increase water velocities, carrying carcasses away from an affected section of water course. Also, scavengers may remove carcasses before a follow-up survey can be conducted (Fahy, 1985). Surface glare, turbulence, elevated turbidity, excessive depth, poor accessibility and complex stream characteristics can all reduce the efficacy of direct visual-count methods (Hankin & McCanne, 2000), often leading to an underestimate of actual losses (Hayne, Ober, Schaff & Scott, 1980). In an attempt to understand fish kill dynamics, some researchers have undertaken simulated fish kills (Labay & Buzan, 1999; Muhametsafina, Midwood, Bliss, Stamplecoskie & Cooke, 2014). No published information is currently available on the relationship between time lapse from mortality incident to follow-up survey and consequent post-kill, survey-derived estimates of fish losses.

In Northern Ireland, a fish carcass count is undertaken, where possible, after every fish kill event reported to the inland fishery authority. The survey is generally conducted as soon as possible after the incident is reported, irrespective of the time lapse since the incident. This time lapse can vary considerably, depending on how quickly the kill event is discovered, reported and assigned to fisheries staff for investigation. To improve confidence in the efficacy and value of carcass counts with increasing time lapse between incident and follow-up survey, a field experiment was conducted in which a fish kill event was simulated in a natural stream environment with replicated, controlled carcass counts over time.

The main objectives were to investigate the following: the accuracy of carcass counts between surveyors with increasing time lapse between the simulated mortality event and the follow-up survey; the persistence of carcasses in relation to size and time lapse between the simulated mortality event and the follow-up survey; and dispersal patterns of the simulated mortality event within the experimental stream over time.

2 | MATERIALS AND METHODS

The study was conducted in Altnahinch Stream, a small upland water course that feeds an extensive man-made reservoir in the headwaters of the River Bush catchment in Northern Ireland (Figure 1). The stream has a mean width of ≈ 3.7 m and rises at an altitude of ≈ 360 m on heather moorland, which has been the subject of coniferous re-forestation. The stream is dominated by shallow (< 30 cm), riffle stretches with a cobble substratum (64–256 mm particle size), although there are also a number of shallow pools (≈ 60 –80 cm). Under normal non-spate discharge rates, the stream is transparent with a slight peat stain and the streambed is clearly visible. Brown trout, *Salmo trutta* L., are resident within the stream but migratory fish species, for example Atlantic salmon, *Salmo salar* L., are absent due to the barrier presented by the downstream reservoir. The riparian strip on both sides of the stream was relatively open, and the experimental section was entirely accessible along both banks.

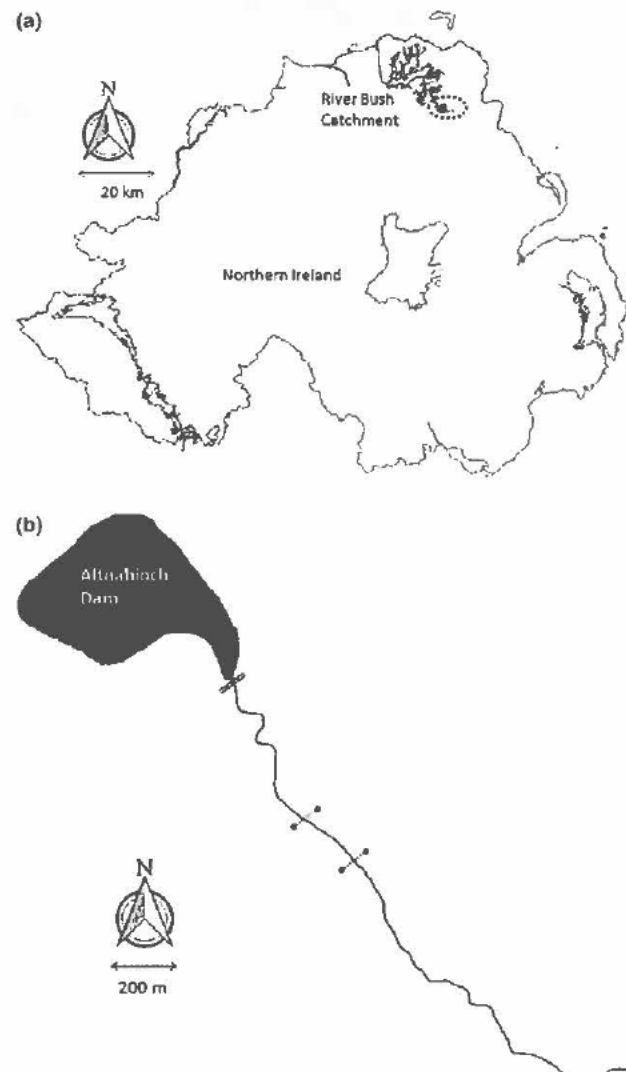


FIGURE 1 (a) The location of the River Bush catchment and Altnahinch stream in Northern Ireland and (b) Altnahinch experimental stream indicating the simulated fish kill area (dashed lines) and the bottom stop net (double lines)

A fish kill was simulated by scientific staff from the Agri-Food and Biosciences Institute (AFBI) for Northern Ireland, using hatchery-reared brown trout, reflective of the age structure and population density that would be expected naturally in Altnahinch Stream (Kennedy & Strange, 1986). A batch (614 in total) of disease-free, healthy, hatchery-reared brown trout were obtained from the Department of Agriculture, Environment and Rural Affairs (DAERA) aquaculture facility on the Lower Bann River, N. Ireland. These fish were culled by an overdose of anaesthetic (tricaine methanesulphonate) on the morning of 23 June 2014. The fish were then disinfected with potassium permanganate at 4 mg/L concentration and then rinsed with distilled water twice, and within an hour, the carcasses (347 fish < 8 cm L_F ; 169 fish of 11–14 cm L_F ; 98 fish > 17 cm L_F) were transported in iced containers and placed directly into the experimental stream in a random, scattered manner throughout a pre-designated 227-m section of the

TABLE 1 The fork length size class, associated simulated age class, number and density of brown trout carcasses introduced to simulate a fish kill in Altnahinch Stream, Northern Ireland

Size class	Age class	No. of carcasses	Density (no./100 m ²)
<8 cm	0+	347	41.3
11–14 cm	1+	169	20.1
≥17 cm	>1+	98	11.7
Total		614	73.1

stream. The fish were chosen to reflect the respective natural 0+, 1+ and >1+ L_F categories (Table 1). A stop net was secured in the stream 505 m below the experimental fish kill zone, just above where the stream enters the downstream reservoir. This net was checked daily, and any carcasses discovered were measured, recorded and removed.

2.1 | Fish kill surveys and data analysis

Post-incident surveys were undertaken following the simulated fish kill during daylight hours by experienced DAERA fishery enforcement staff (surveyors) with previous experience in conducting post-fish kill counts. Surveyors were equipped with a survey sheet, a 1:10,000 scale map of the stream and a 30-cm fish measuring board with 1-cm intervals, but they were given no background information on the simulated kill: they were asked to survey the stream (walking on either bank), taking as much time as needed to note the extent of the kill on the map, and to conduct a visual count of mortalities by species and age class. Surveyors were instructed not to disturb or remove any carcasses and not to confer with any other surveyors during or after the survey.

Surveys were conducted at 4, 24, 48, 72 and 96 hr after the simulated fish kill. Replicate surveys were undertaken by six different surveyors at each time interval. At the start of each replicate survey, surveyors began at the same starting position, ≈150 m above the simulated fish kill area, but with a staggered starting time to avoid concurrent surveying and the possible interaction amongst surveyors that could potentially occur. The datasheets were collected at the end of each replicate survey, when AFBI staff immediately checked the downstream stop net—any carcasses collected in it were measured, recorded and removed. AFBI staff then walked upstream and noted the number, L_F and position of any carcasses that had dispersed below the original simulated fish kill zone, but these fish were not removed. Following the final survey (at +96 hr), and after the downstream stop net catch and dispersed fish were noted, all remaining carcasses that could be seen were removed from the stream for disposal.

A residual maximum-likelihood (REML) model (VSN International, 2013) was used to analyse the carcass count data generated from the repeated walk over surveys, to test for significant differences in the main effects of fish size (<8, 11–14, >17 cm L_F), the time-lapse period (4, 24, 48, 72, 96 hr) and their interaction. The surveyor and time-lapse period variability was accounted for with a power function fitted to the lag period term as the time interval between successive surveys was unequal.

3 | RESULTS

The number of brown trout carcasses observed by surveyors declined during the study. Of the initial 614 carcasses introduced to the stream, 391 were observed 4 hr after placement, 368 after 24 hr, 318 after 48 hr, 195 after 72 hr and 81 after 96 hr. The smallest size class (<8 cm L_F) showed the highest reduction, with 52% of the initial number of introduced carcasses observed at 4 hr, and only 2% observed at 96 hr (Table 2). The intermediate and larger size classes declined more slowly, with 18% of 11–14 cm L_F fish and 43% of >17 cm L_F fish still observed at the experiment's conclusion (Table 2).

The interaction between survey time lapse and fish L_F was highly significant (REML model: Wald Statistic 82.7, *p* < .001). When the time-lapse series was examined within each fish size class, distinctive patterns were observed with significant differences at various time points. A significant decrease was observed between the number of small (<8 cm L_F) trout initially introduced (*n* = 347) and the mean carcass count (181; least significant difference (LSD) = 18) at 4 hr. The observed number of small trout continued to decline significantly between sequential surveys (Figure 2). The number of 11–14 cm L_F trout detected at 4 hr decreased significantly from the initial 169 to a mean count of 119 carcasses (LSD = 18). No significant differences were then detected for 11–14 cm L_F fish at 24 hr or 48 hr (120 and 104 fish, respectively), but a further significant decline (Figure 2) in the carcass count was detected at 72 hr (65 fish) and again at 96 hr (31 fish). The >17 cm L_F class showed no significant difference between the 98 introduced fish and the mean carcass count (91; LSD = 18) after 4 hr. No significant decline in the number of observed carcasses was detected for >17 cm L_F fish within the first 48 hr of the simulated fish kill, with a mean count of 94 and 93 fish recorded at 24 hr and 48 hr, respectively. The number of >17 cm L_F fish counted after 72 hr decreased significantly to 68 carcasses, decreasing further to 42 carcasses at 96 hr (Figure 2).

The coefficient of variation (CV) between the surveyors was generally low (<0.2) for most fish classes across most time periods. Two exceptions to this tendency were observed, initially for >17 cm L_F fish at 4 hr, when CV = 0.33, and secondly for <8 cm and 11–14 cm L_F classes at 96 hr, when CV increased markedly to 0.93 and 0.51, respectively (Figure 3).

Downstream dispersal of carcasses from the planting zone was very limited during the initial 24 hr of the experiment, with no displaced fish carcasses observed. A small number (12 fish) of <8 cm L_F trout were observed to have dispersed up to 227 m downstream from the introduction area at 48 hr, and this downstream displacement

TABLE 2 The mean percentage of brown trout carcasses by fork length size class observed at increasing time lapse following introduction into Altnahinch Stream

Size class	4 hr	24 hr	48 hr	72 hr	96 hr
<8 cm	52	44	35	18	2
11–14 cm	71	71	60	38	18
>17 cm	93	96	99	69	43

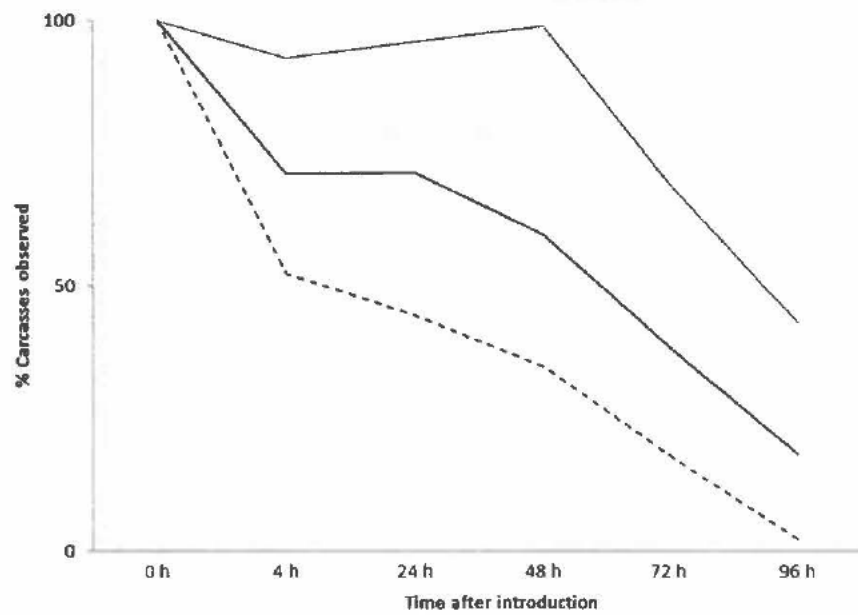


FIGURE 2 The mean percentage of brown trout carcasses observed at increasing time lapse after introduction to Altnahinch stream; where the dashed line shows trout <8 cm L_p, the black line shows 11-14 cm L_p trout and the grey line shows larger trout >17 cm L_p

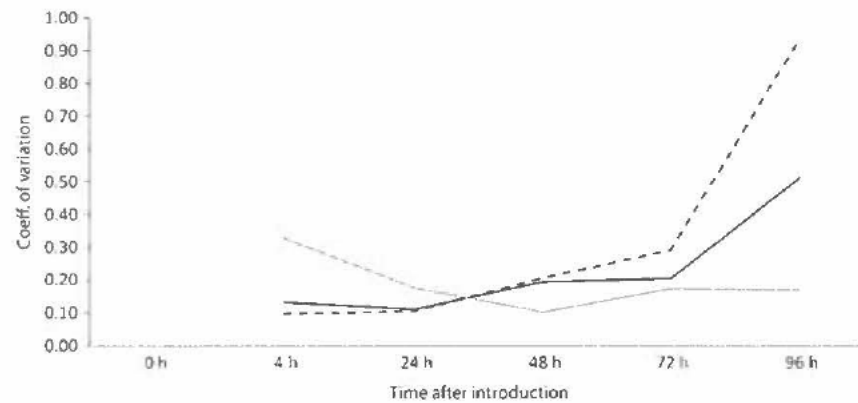


FIGURE 3 The coefficient of variation associated with carcass counts of dead brown trout in Altnahinch stream; where the dashed line shows trout <8 cm L_p, the black line shows 11-14 cm L_p trout and the grey line shows larger trout >17 cm L_p

further extended to 505 m at 96 hr (Table 3). There was only limited downstream displacement of larger fish carcasses during the experiment, with six 11-14 cm L_p fish displaced 35 m downstream at 96 hr and no fish of >17 cm L_p observed downstream of the initial introduction area during the study (Table 3).

4 | DISCUSSION

This small-scale fish kill simulation showed that the number of carcasses visible to surveyors declined with increasing time lapse between carcass planting and the follow-up survey. Direct visual surveys of carcasses showed good consistency between the observed counts for the three discrete size fractions of fish during the first 72 hr of the experiment (Figure 3). This relatively close agreement may have been due, in part, to the artificially well-segregated size distribution of hatchery fish used in the experiment. This distinct size segregation was different to the often overlapping, multimodal, length-frequency

distributions usually seen in wild fish populations, and this made it easier for the experienced surveyors to differentiate between the simulated size classes. The greatest variation between individual surveyor's carcass counts was at the 96-hr survey for the smallest (<8 cm L_p) size category. After 4 days, relatively few small fish remained visible, and the visible carcasses had dispersed throughout the stream. By the final survey, the combined effect of low numbers of small fish carcasses and high dispersal levels leads to an increased variation between the counts and reinforces the need to undertake prompt post-kill investigations.

The present work was conducted during low discharge conditions in a small, clear, oligotrophic upland stream that afforded good access, with virtually no riparian cover. These circumstances amounted to near optimal conditions for the maximum retention and subsequent detection of fish carcasses in the stream. The detection of only half of the smallest (<8 cm L_p) fish just 4 hr after the simulated kill was surprising, which indicates underestimation of that size class was most likely due to surveyors not observing these smaller fish rather than

Size class	4 hr		24 hr		48 hr		72 hr		96 hr	
	n	(m)	n	(m)	n	(m)	n	(m)	n	(m)
<8 cm	0	0	0	0	12	227	8	227	5	505
11–14 cm	0	0	0	0	0	0	9	30	6	35
>17 cm	0	0	0	0	0	0	0	0	0	0

TABLE 3 The number (n) of brown trout carcasses (by fork length size class) that had displaced downstream (maximum distance in m) out of the initial simulated fish kill area at increasing time lapse after initial introduction

any translocation or scavenging of the carcasses. Following initial introduction into Altnahinch Stream, the carcasses sank and then settled on the stream bed, with the smaller fish more easily concealed from view after settling amongst the dark basalt cobble substratum. While it is true that these smaller fish would be more susceptible to removal from the survey area through scavenging, more rapid decomposition and more rapid downstream translocation by the flow than larger carcasses (Hankin & McCanne, 2000) these factors did not start to take effect until 24 hr after the simulated kill. Some potential scavengers such as red fox *Vulpes vulpes*, L. and grey heron *Ardea cinerea*, L. are found in the Altnahinch Stream area but none were observed during daylight hours of the experiment, most likely because of the more-or-less continuous presence of surveyors and scientists during the experiment. This lack of initial biological and physical influences and the close agreement between the carcass counts at 4 hr and 24 hr indicates that size-mediated limitation of the visual survey technique was the primary determinant of the results during the first day of the experiment. Small fish (<15 cm L_T) and less abundant species were underestimated to a much larger degree in fish kill counting procedures on a small stream study elsewhere (Labay & Buzan, 1999). In the present study, the high count of larger carcasses (>17 cm L_T) relative to the introduced number (>90%) during the first 48 hr after the simulated kill suggests that these larger fish were more visible and thus more readily counted (Table 2). In addition, the high persistence of the larger carcasses also indicated the relative lack of activity by scavengers at the site during the first 48 hr.

4.1 | Biological processes—scavenging, decomposition and natural dispersal

The number of observed 11–14 cm L_T carcasses declined markedly by the 48-hr survey, and >17 cm L_T carcasses declined sharply by 72 hr (Table 2), with increasing evidence of scavenging activity at the site, mainly by foxes. The longer-term patterns in carcass counts were therefore more likely driven by site-specific biological processes, such as dispersal on bloating, decomposition and scavenger consumption rates. Simulated fish kills in small North American streams have shown that fish carcasses were rapidly scavenged, with reported removal rates of >60% after 16 hr (Labay & Buzan, 1999), 40%–90% after 2 days (Ryon et al., 2000) and up to 86% after 24 hr (Muhametsafina et al., 2014). Similar high scavenging rates were also observed in a lake environment where 82% of carcasses were rapidly consumed by other fish and turtles (Schneider, 1998). During the present study, no larger carcasses (>17 cm L_T) were found to have dispersed downstream from the initial carcass planting area. Relatively limited dispersal patterns

of white sucker, *Catostomus commersonnii* Lacepède, carcasses (127–140 mm L_T) were observed in a small stream where the mean daily dispersal distances for PIT tagged fish ranged from 0.0 to 7.6 m/day and included downstream and lateral dispersal (Muhametsafina et al., 2014). In a telemetry study in Germany, radio-tagged dead salmon *Salmo salar* L. smolts (mean L_T = 15.2 cm) exhibited relatively limited dispersal with most drifting only a few metres to a few hundred metres by the end of the study (Havn et al., 2017). Smaller fish, by contrast had dispersed downstream by over 500 m after 96 hr in the present study (Table 3). Decomposition rates of fish carcasses vary according to a range of factors, including fish size and water temperature (Parmenter & Lamarra, 1991), with decomposition rate more rapid for fish remaining in-stream compared to those removed onto the adjacent shore (Muhametsafina et al., 2014). Freshly dead adult sockeye salmon *Oncorhynchus nerka*, Walbaum, were observed to sink initially, and the time taken for the carcass to surface was inversely related to water temperature and ranged from one to 3 days at 20°C to 12–18 days at 6°C (Patterson et al., 2007). Water temperature in Altnahinch Stream varied between 10 and 14°C, and as time progressed during the study some of the carcasses started to decompose, bloat and then be translocated by the stream. As decomposition rates were higher on smaller fish, this may have accounted for the differential distribution of small and large carcasses at 96 hr (Table 3).

The time lapse between a fish kill incident and the follow-up survey is of critical importance to the accurate visual count of losses since increased time lapse reduces count viability due to translocation, decomposition and scavenging of carcasses (Ryon et al., 2000). A carcass count conducted on the Blackwater River in Northern Ireland several days after a fish kill event only accounted for ≈ 5% of the actual number of salmonids killed (Kennedy et al., 2012). The present study has further indicated that, even given ideal survey conditions, smaller fish can be grossly underestimated after a relatively short time lapse (4 hr); this highlights the limitations in achieving a full account of losses for even the most timely follow-up investigation and should be considered by managers using visual survey data for fish kill investigations. Fishery managers should be aware that the patterns of fish carcass distribution following a mortality event will be influenced by the assessment method (visual underestimates), environmental conditions (discharge, temperature, substratum, depth, turbidity, accessibility) and biological processes (scavenging, decomposition) with all these processes likely to be context specific and interactive. In addition, a telemetry study conducted in Germany indicated that the species of fish killed may also influence subsequent carcass distribution patterns, as dead eels drifted over 12 times further than salmon smolts after placement of

the carcasses in a river (Havn et al., 2017). Carcass count data may, at best, provide a partial estimate of total losses following a fish kill, and there is clear scope for the application of upward expansion factors from visual counts for post-kill assessments of stock losses, accounting for fish size, species and any significant local biological and environmental factors.

The inability to mimic the behaviour of stressed fish, upon exposure to a pollutant, before they die and settle is a major disadvantage of artificial simulated fish kills. Zięba et al. (2014) showed that acoustically tagged barbel *Barbus barbus* (L.) exhibited high site fidelity despite exposure to a water pollution incident in a southern English river. Hesthagen (1989), by contrast, suggested that stressed, dying salmonids can exhibit a general downstream migration pattern in response to exposure to noxious substances. This behaviour could potentially result in carcasses translocated over an extended area and even remove a proportion of subsequent losses from the perceived pollution or fish kill area, a phenomenon that cannot be readily replicated or studied artificially.

Most experimental work on fish kill assessment methods has occurred on small streams to facilitate access and experimental convenience. The efficacy of direct counting procedures in larger rivers is likely to be reduced due to increased depth and lower visual accessibility. Future work investigating the dynamics of fish kill events in larger, deeper rivers would be challenging but of significant value for fishery managers.

In conclusion, direct carcass counts can be a useful tool to assess the distribution and magnitude of fish mortalities after a fish kill incident and can be reflective of losses particularly for larger fish in small streams with low scavenging rates. The time lapse between the kill event and the follow-up survey is critical, as the count accuracy declines, and the coefficient of variation around visual estimates increases, with increasing time lapse. However, even with good conditions (low discharge rate, good access, a relatively short lapse time between the kill, and the follow-up survey and low scavenging rates), smaller fish can still be grossly underestimated in cobble/gravel salmonid nursery streams.

ACKNOWLEDGMENTS

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18/3/24 At 0945, miss Fair deli bus at Ballygray Bridge over dead fish down to Dooagh Mat Person 2 at 1000. Passed to Bear Mt. Drop 4MB. No dead fish P.C. Ret Ballygray Bridge. Dead fish + insects. Water was clear. No odor c 30 dead fish in 25m d/i of bridge. Drove up + camp was. No dead fish along field at [redacted]

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Ret to Ballygray 1120. Passed to farm lane / bridge at [redacted] 730 dead fish c 50m d/i of bridge. Person 2 I called up/s At 1210, obs active discharge. NB. several fish of dead fish. Trout + shubunkers. Active discharge from plastic pipe. Plume in river of 7-3m. High odor. Dark green color. Continued up. No dead fish from pipe up to field boundary. Sample some / took of volume of H₂O. Ret to van 1228. Sampling but ret to river At 1240, witnessed by Person 2 collected sub-sample. Ret to van. Sealed

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+ labelled in ref 123/24/0504 1338 obs [Address Redacted] his son. Met [Name Redacted] Exp unit. Exp chamber in field. Green aq. effluent P.C. Exp tank only to read bar. [Name Redacted] stated been moving slurry last night. Bag was get days to. Incur exp chamber. Discussed exp policy + procedure. Declined to witness record that: At 1600, Person 2 I collected record that. Filed by [Name R]. Witnessed me descent to 3 bottles. NB. full of fish. Sub 50L min. Full of record 50L min. Ret to yard. Exp chamber only. to read bar. [Name F] stated that

79

pipe was from ring down to discharge. Dark green / black liquid in outlet from chamber. [Name] stated he would removed the x6 loads of slurry added to the tank yesterday. Reported [Name] Sealed + labelled record that in ref 123/24/0504 B. [Name Redacted] opening tank + slurry further. Reported [Name Re] leaving slurry from tank. exp chamber in field at 1540. Discharge active. exp was in [Name R]. Ret to chamber. [Name R] left to empty slurry tank. At 1528, into day P.C. Down to van. At 1530, obs dye in van. Ret to yard.

Person 1 notebook entry

80

beginning [Name Redacted] 1545. Exp formalities to conduct. At 1547 continued [Name Redacted] + made aware of rights under PARS

Person 1 Do you understand the contents?
 [Name Redacted] Yes.

Person 1 These test.

Person 1 Can you state your full name, address and date of birth please?
 [Name Redacted] [Name Redacted] [Address Redacted]
 [Address Redacted] Redacted

Person 1 Are you the owner of the farm here?
 [Name Redacted] Yes.

Person 1 The sole owner?
 [Name Redacted] Yes. You could call it that

Continued in No [Redacted]

Person 1 notebook entry

Person 1 Tell us about the slurry you moved into the tank beside the boreal bin.
 [Name Redacted] Yesterday [Redacted] I still have a large number of cattle housed. We are preparing to part in / harvest slurry on Monday, which will then be removed. As in the ground will be done after the slurry is taken off. Yesterday, as two of the tanks below the cattle were full, I removed three loads from each tank and put them into the storage tank.

Person 1 Is that the tank beside the manure bin?

2

[Name Redacted] Yes

Person 1 Please continue

[Name Redacted] I didn't realize that there was any issue until today when I was approached by two members of the DSA. What action did you take to stop the discharge?

Person 1 After identifying the problem along with the DSA personnel we come to the conclusion that the leak originated from my stock tank. I then shifted livestock to fields. The then proceeded to move slurry from the tank until the offending flow stopped. Or the offending leakage

Person 1 notebook entry

3

Person 1 stopped.
 How many loads did you remove?
 [Name Redacted]
 So far I have taken 4 out and the 5th is in the tanker. I do intend removing more and will provide evidence of the leak being stopped.
 Person 1 What other action do you propose undertaking to prevent this happening again.
 [Name Redacted] Person 1 As soon as the tank is emptied, we will conduct a thorough inspection to establish where the leak came from and it will be repaired.

4

Person 1 Is there anything else you would like to add?
 [Name Redacted] It wasn't intended by all means.
 [Name Redacted] Informant contacted at 1601.
 [Name Redacted] declined to have notes read by [Name Redacted]
 [Name Redacted] Redacted [Name Redacted]
 [Name Redacted] Redacted [Name Redacted]
 At 1603, offered [Name Redacted] choice of both 2 hats [Name Redacted] as retained. Person 1 [Name Redacted] contact details. Agreed to re-visit early next week. Reported from at 1611. At 1630, passed x2 remaining portions of WRS/24/0504 and x2

5

Person 2 remaining portion of WRS/24/0504 B to [Name Redacted] for onward transport to [Name Redacted] [Name Redacted]
 Person 1
 21/5/24 At 1500 Person 2 [Name Redacted] (Address Redacted) [Name Redacted] The area [Name Redacted] in yard at 1507 by [Name Redacted] Farm worker removing sludge from 4/8 store in sludge tanker + applying to fields. Proceeded to field in front of house. Top now looks fine with reaction to Saturday. Still slight green discoloration + a slight odour. Suggested spring water with remnants of sludge in water [Name Redacted] outlined further remedial works planned

6

for next few days. Agreed to revisit in coming days. Let to yard + discussed with [Name Redacted] and [Name Redacted] + [Name Redacted] left at 15240. Person 1

Person 1 notebook entry

23

11/6/24 At 1505, Person 2 + I arrived at [Address Redacted] [Name Redacted] Trap checker in field. Discharge cell clear. P.O. trap 0455, behind for 21ft. P.O. outlined plan.

24

remedial work. Agreed to get work 27/6. [Name Redacted] to ring when areas work completed. Left at 1548.

Person 1

41

27/6/24 At 1510 [Address Redacted] arrived at [Address Redacted]

his name [Name Redacted] on the ground trap 0455. Obs excavation along edge of slung tank. Slung along pipe + rat waste exposed. Dark staining surrounding + below rat waste. P.O. Also obs 02 unrod high level insects. No staining around cells. [Name Redacted] stated both banded [Name Redacted] cap features work which he proposed undertaking. Offered

Part V: DISCLOSURE

(form PPS 13 (Departmental))

CONTENTS	PAGE NO (s)
DISCLOSURE OFFICER'S REPORT	7

DISCLOSURE OFFICER	
I certify that all disclosure obligations have been discharged by NIEA in connection with the material arising from this investigation.	
Signature of Disclosure Officer: [REDACTED] Person 4	
Date:	09/04/2025
Full name:	[REDACTED] Person 4
Grade:	Staff Officer
Telephone number:	[REDACTED] Redacted
Email:	[REDACTED] Redacted
Fax:	

If different from above, who should PPS contact if requiring further information/clarification on this file?

CONTACT OFFICER	
Full name:	
Grade:	
Telephone number:	
Email:	
Fax:	



SCHEDULE OF NON-SENSITIVE MATERIAL

DAERA NIEA -v- [Name Redacted] [Address Redacted]

The disclosure officer believes that the following material is NOT sensitive

Item No	Description	Location e.g. on file, held by investigator etc.	For PPS/Prosecutor use only.
			Enter E (Evidence) Enter DC (Disclosure Copy) Enter DI (Disclose by inspector) Plus comment if necessary
1	One portion of Statutory Sample WR 3/24/0504	Held in Laboratory in Lisburn	
2	Witness Statement of: Person 1 (RMcF) (9 pages dated 26/11/2024)	On File	
3	Witness Statement of: Person 2 (3 pages dated 16/01/2025)	On File	
4	Witness Statement of: Person 5 (2 pages dated 19/06/2024)	On File	
5	Witness Statement of: Person 6 (2 pages dated 24/05/2024)	On File	
6	Witness Statement of: Person 7 (1 page dated 20/05/2024)	On File	
7	Witness Statement of: Person 8 (3 pages dated 17/03/2025)	On File	
8	<u>Map and Photographic Exhibits</u> Person 1 /1 Sketch map of the Ballyclover Burn and Four Mile Burn Person 1 /2 Sketch map of the Ballyclover Burn to Ballyvov Bridge where it becomes the Four Mile Burn Person 1 /3 Orthophotograph of the farm at Address Person 1 /4 Four Mile Burn visually clean and no dead fish observed (18/05/2024)	On File	





- Person 1/5** Dead fish in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024
- Person 1/6** Dead fish in Ballyclover Burn (immediately upstream of Ballyvoy Bridge) 18/05/2024
- Person 1/7** Dead macroinvertebrates in Four Mile Burn (immediately downstream of Ballyvoy Bridge) 18/05/2024
- Person 1/8** Dead fish in Ballyclover Burn 18/05/2024
- Person 1/9** Dead fish in Ballyclover Burn 18/05/2024
- Person 1/10** Dead fish in Ballyclover Burn 18/05/2024
- Person 1/11** Pipe actively discharging weak dilute slurry to the Ballyclover Burn at [Redacted]. Statutory sample WR 3/24/0504 was collected from this location 18/05/2024
- Person 1/12** Flow of green coloured agricultural effluent through inspection chamber in Field [Redacted] at [Address Redacted] [Redacted] Statutory sample WR3/24/0504B was collected from this location 18/05/2024
- Person 1/13** Dried slurry on the slats of the below ground slurry store 18/05/2024
- Person 1/14** Inspection chamber adjacent to slurry tank 18/05/2024
- Person 1/15** Inspection chamber adjacent to slurry tank 18/05/2024
- Person 1/16** Drain tracing dye in inspection chamber in Field [Redacted] (18/05/2024)
- Person 1/17** Drain tracing dye actively discharging to the Ballyclover Burn at [Redacted] (18/05/2024)
- Person 1/18** Transcript of Interview with [Name Redacted] recorded by hand, on 18 May 2024, at [Address Redacted] [Redacted] by **Person 1**, NIEA
- Person 1/19** Inspection chamber in Field [Redacted] (18/05/2024)
- Person 1/20** Inspection chamber in Field [Redacted] (18/05/2024)



- Person 1/21 Level of the slurry very near the bottom of the store (11/06/2024)
- Person 1/22 Liquid in bottom of inspection chamber adjacent to meal bin visually clean (11/06/2024)
- Person 1/23 Email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24a Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24b Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24c Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24d Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24e Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24f Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24g Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24h Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/24i Image attached to email received from [Name Redacted] on 27 June 2024 at 0027 hours
- Person 1/25 Reply to email received from [Name Redacted] on 27 June 2024
- Person 1/26 Recently exposed return nozzle with dark staining on the outer wall of the slurry store 27/06/2024
- Person 1/27 No staining on the other slurry store walls at the unused high level inlet pipes 27/06/2024
- Person 1/28 Copy of Postal Caution sent to [Name Redacted] via recorded delivery dated 16/07/2024
- Person 1/29a Copy of Proof of Certificate of Posting of Postal Caution sent to [Name Redacted] on 16 July 2024



Person 1/29b Copy of Proof of Delivery of Postal Caution sent to [Name Redacted] on 16 July 2024

Person 1/30 Copy of second Postal Caution sent to [Name Redacted] by email (sent 05/09/2024)

Person 1/31 Copy of email sent to [Name Redacted], attached to which was a second Postal Caution (05/09/2024 12:23)

Person 1/32 Copy of email from [Name Redacted] (05/09/2024 13:56)

Person 1/33a Copy of email from [Name Redacted] (23/09/2024 09:01)

Person 1/33b Copy of email from [Name Redacted] (23/09/2024 13:37)

Person 1/33c Copy of email from [Name Redacted] (02/10/2024 14:39)

Person 1/33d Copy of email to [Name Redacted] (03/10/2024 10:08)

Person 1/33e Copy of email from [Name Redacted] (09/10/2024 00:21)

Person 1/33f Copy of email to [Name Redacted] (09/10/2024 11:40)

Person 1/34 Copy of email from [Name Redacted] (31/10/2024 13:01)

Person 1/35a Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1/35b Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1/35c Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1/35d Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1/35e Copy of photograph attached to email received from [Name Redacted] on 31 October 2024

Person 1/35f Copy of photograph attached to email received from [Name Redacted] on 31 October 2024



	<p>Person 1/35g Copy of photograph attached to email received from [Name Redacted] on 31 October 2024</p> <p>Person 1/35h Copy of photograph attached to email received from [Name Redacted] on 31 October 2024</p> <p>Person 1/i Copy of photograph attached to email received from [Name Redacted] on 31 October 2024</p> <p>Person 1/36a Copy of email sent to [Name Redacted] (31/10/2024 13:24)</p> <p>Person 1/36b Copy of email from [Name Redacted] (31/10/2024 13:27)</p> <p>Person 8 i An assessment of carcass counting surveys with increasing time lapse following a simulated fish kill on a small upland stream</p>		
9	Copies of Notebook	On File	
10	Notebook Entries	Held by Officer	

Signed: [Person 4]

Signed: _____

Disclosure Officer

PPS Prosecutor

Date: 09/04/2025

Date: _____

CONFIDENTIAL



SCHEDULE OF NON-SENSITIVE MATERIAL Page 1 of 1

DAERA NIEA -v- [Name Redacted] [Address Redacted]

Disclosure officer believes that the following material is NOT sensitive

Item No	Description	Location e.g. on file, held by investigator etc.	For PPS/Prosecutor use only.
			Enter E (Evidence) Enter DC (Disclosure Copy) Enter DI (Disclose by inspector) Plus comment if necessary
1.	NONE		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

Signed: **Person 4**

 Disclosure Officer

Date: 09/04/2025

Signed: _____
 PPS Prosecutor
 Date: _____

CONFIDENTIAL

NOT TO BE DISCLOSED
SCHEDULE OF SENSITIVE MATERIAL

DAERA NIEA -v- [Name Redacted] [Address Redacted]

The Disclosure Officer believes that the following material IS sensitive

Item No	Description	Reason for sensitivity	Location State if supplied to Prosecutor/ otherwise state location
1.	NONE		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Signed by Disclosure Officer: Person 4

Date: 09/04/2025

NOT TO BE DISCLOSED
SCHEDULE OF SENSITIVE MATERIAL