Annual Environmental Report 2018

Bord na Mona Energy Ltd
(Derrygreenagh Group of Bogs)
IPC Licence P0501-01

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Facility Information Summary	
AER Reporting Year	2018
Licence Register Number	P0501-01
Name of site	Bord na Mona Derrygreenagh
Site Location	Derrygreenagh, Rochfortbridge, Co Westmeath
NACE Code	0892
Class/Classes of Activity	1.4
National Grid Reference (6E, 6 N)	249450, 238140
A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.	Activities on site can be divided into two components, firstly the milling, harrowing, ridiging and harvesting of peat into stockpiles and secondly the transportation of that peat via an internal rail network to the Power Station and lorry outloading facilities. Production achieved was approximately 268,559 tonnes which was slightly up on the 2017 figure. Infrastructurally, there was no bog development. Quarterly grab sampling was 100% compliant, with the continuous composite sampling returning no non-compliances for suspended solids. There were three environmental complaints received during the reporting period, this was dust related and was resolved to the satisfaction of the complainants. The number of incidents reported rose in 2018. These were mainly trigger level exceedences for ammonia and COD due to the exceptionally dry summer we experienced. In relation to silt pond cleaning, 75% of ponds received two cleanings.The remaining 25% of silt ponds serviced a bog that was not operational in 2018 but were cleaned in December 2017, June 2018 and again in January 2019, so did receive two cleaning within the 12month period. Inspections dictate cleaning schedules. Decommissioning and Rehabilitation works are described in an attachment. During the period of reporting, a draft Rehabilitation plan was submitted along with consent sought and approved for two new trail projects, namely the trial cultivation of herbs and wildcrafting for indigenous herbs and plant water

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

E. Mullall	15-3-19
Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	Date

AIR-summary template

Lic No: P0501-01 Year 2018

Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	No	Fugitive emissions only

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below	No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? Basic air monitoring checklist AGN2	Yes	

Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

Note 1: Volumetric flow shall be included as a reportable parameter

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	No	
	If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	No	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	No	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No	

AIR-summary template

Lic No: P0501-01 Year 2018

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
DM-01	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	8176	71	0	0	Dust monitioring took place on 5 occasions for 28 days each time between April and September
DM-02	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	14448	178	0	0	
DM-03	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	30688	305	0	0	
DM-04	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	14280	178	0	0	
	SELECT				SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table A3: Abatement system bypass reporting table

Bypass protocol

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

Solvent use and management on site

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5 — SELECT

Table A4: Solvent Management Plan Summary Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways	Solvents destroyed onsite	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)	Lic No:	P0501-01	Year	2018

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	Yes	
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	Yes	Monthly COD of yard run-off is attached.

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below		No	
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist / Assessment of results checklist	Yes	Surface water monitoring was carried out on a quarterly basis. The results of which are attached.

Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0501-01 Year 2018

Continuous monitoring

		Additional Information
5 Does your site carry out continuous emissions to water/sewer monitoring?	Yes	Flow proportionate composite sampling

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6 Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below**	Yes	Total of 101 days over 365 days
7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	Yes	
8 Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	No	

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
SW43	Water	Suspended Solids	35	24 hour	All results < 1.5 times ELV, plus from ten 8 results must be ELV >	mg/L				0	
SW43	Water	Ammonia (as N)	2.78	Weekly	NA	mg/L					
SW43	Water	Total phosphorus	NA	Weekly	NA	mg/L					
SW43	Water	COD	100	Weekly	NA	mg/L					
SW43	Water	volumetric flow	NA	24 hour	NA	m3/day			2424		Down time due to battery failure, and sampler repairs. Agency informed of repairs.
SW43	Water	Total Dissolved Solids	NA	Weekly	NA	mg/L					

note 1: Volumetric flow shall be included as a reportable parameter.

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template	Lic No:	P0501-01	Year	2018

Bund testing

dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	Other (2 Yearly)	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	
4	How many bunds are on site?	1	
5	How many of these bunds have been tested within the required test schedule?	1	
6	How many mobile bunds are on site?		
7	Are the mobile bunds included in the bund test schedule?	No	
8	How many of these mobile bunds have been tested within the required test schedule?	0	
9	How many sumps on site are included in the integrity test schedule?	0	
10	How many of these sumps are integrity tested within the test schedule?	0	
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	N/A	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	N/A	
13	Is the Fire Water Retention Pond included in your integrity test programme?	N/A	

Table B1: Summary details of bund /containment structure integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
Derrygreenagh Bund NO:501-37-01	reinforced concrete		Gas Oil	110,592	45000	Hydraulic test		22/05/2017	Yes	Pass	N/A	N/A	N/A	N/A

*Capacity required should comply with 25% or 110% containment rule as detailed in your licence

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?	bunding and storage guidelines	SELECT
16	Are channels/transfer systems to remote containment systems tested?		SELECT
17	Are channels/transfer systems compliant in both integrity and available volume?		SELECT

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified**	Yes	No underground tanks or pipelines on site
2	Please provide integrity testing frequency period	SELECT	

*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

Please use commentary for additional details not answered by tables/ questions above

Groundwater/Soil monitoring template	Lic No:	P0501-01	Year	2018

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	no		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requireme	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	yes	Drinking water well	
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	no		
5	Is the contamination related to operations at the facility (either current and/or historic)	no		
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A		
7	Please specify the proposed time frame for the remediation strategy	N/A		
8	Is there a licence condition to carry out/update ELRA for the site?	N/A		
9	Has any type of risk assesment been carried out for the site?	N/A		
10	Has a Conceptual Site Model been developed for the site?	N/A		
11	Have potential receptors been identified on and off site?	N/A		
12	Is there evidence that contamination is migrating offsite?	N/A		Please enter interpretation of data here

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
							SELECT			SELECT
							SELECT			SELECT

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Groundwater/Soil monitoring template	Lic No:	P0501-01	Year	2018

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
							SELECT			SELECT
							SELECT			SELECT

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

Groundwater monitoring template

More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)

Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

Table 3: Soil results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

Environmental Liabilities template	Lic No:	P0501-01	Year 2018	2018

Click here to access EPA guidance on Environmental Liabilities and Financial provision

		Commentary
ELRA initial agreement status	Not a licence requirement	
ELRA review status	NA	
Amount of Financial Provision cover required as determined by the latest ELRA	NA	
Financial Provision for ELRA status	NA	
Financial Provision for ELRA - amount of cover	NA	
Financial Provision for ELRA - type	NA	
Financial provision for ELRA expiry date	NA	
Closure plan initial agreement status	NA	Internal budget provision
Closure plan review status	NA	Internal budget provision
Financial Provision for Closure status	NA	Internal budget provision
Financial Provision for Closure - amount of cover	NA	Internal budget provision
Financial Provision for Closure - type	NA	Internal budget provision
Financial provision for Closure expiry date	NA	

Environmental Management Programme/Continuous Improvement Programme template

Lic No: P0501-01 Year 2018

Highlighted cells contain dropdown menu click to view

			Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	Internal unaccredited EMS.
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Reduction of emissions to Air	Continue to train all employees in environmental matters. Training will be by means of a new four module training programme delivered by dedicated Bord na Mona training specialists. This new training programme includes environmental compliance-IPPC, Biodiversity, Archaeology and Energy management. Hydraulic harrows will be deployed at dust sensitive locations. Continue with the collection of headland peat.	90	In total 34 personnel received training during 2018. Hydraulic harrows were depolyed at 4 locations. Headland peat was collected at all locations and returned with production figures.	Individual	Reduced emissions
Waste reduction/Raw material usage efficiency	Waste streamlining is a project we are particularly interested in continuing and hope to reduce wastes further in the future and be more efficient in dealing with all aspects of waste management	80	Installed a waste management system. Monthly waste reports are returned for records/filing and waste streams are segrated on site to maximise recycling potential.	Section Head	Improved Environmental Management Practices
Waste reduction/Raw material usage efficiency	Continue with the recycling of polyethylene. The sourcing of more recycling contractors will be ongoing.	100	In total 80.9 tonnes of polyethlene were sent off site for recycling. Procurement also exploring the possibility of securing further recyclers. In an attempt to curtail illegal dumping on Bord na Mona remain in contact with Meath and Westmeath Co Councils.	Individual	Improved Environmental Management Practices
Energy Management	As part of an Energy Awareness campaign all aspects of energy consumption will be communicated to personnel with the intention of reducing consumption through awareness	100	The monthly consumption of energy was regurally communicated to the relevant personnel. This included the KPI's for peat production, maintenance and transportation as well as bog pumping and workshop electrical consumption.	Section Head	Reduce overall energy output while maintaining productivity.
Reduction of emissions to Water	Continue to train all employees in environmental matters. Training will be by means of a new four module training programme delivered by dedicated Bord na Mona training specialists. This new training programme includes environmental compliance-IPPC, Biodiversity, Archaeology and Energy management. Continue with the collection of headland peat.	90	In total 34 Personnel received training in 2018. Personnel are trained every two years in Environmental matters. Headland peat was collected at all locations and included as part of overall peat returns.	Individual	Improved Environmental Management Practices

Noise monitoring summary report	Lic No:	P0501-01	Year	2018

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below		No
2	Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6?	Noise Guidance note NG4	NA
3	Does your site have a noise reduction plan		NA
4	When was the noise reduction plan last updated?		Enter date
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?		NA

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
								SELECT	SELECT		SELECT

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? SELECT

** please explain the reason for not taking action/resolution of noise issues?
Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary

Lic No: P0501-01 Year 2018

				Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below		Sep-18	Report on file
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	SEAI - Large Industry Energy Network (LIEN)	Yes	ISO50001 accreditation attained from Certification Europe
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information		NA	Not a Licence requirement

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	6100	5858	NA	NA
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	451	226	NA	NA
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	555.988	1692		
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site

Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Water Emissions: Volume Discharged back to environment(m^3yr)	Water Consumption: Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply							
Recycled water							
Total							

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	92.8				
Non-Hazardous (Tonnes)	332.73				

Table R4: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
			SELECT					
			SELECT					
			SELECT					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					

Complaints and Incidents summary template	Lic No:	P0501-01	Year	2018

Complaints

		Additional information
Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	Yes	

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
04/04/2018	Dust		Complaint about dust blowing into adjoining land and silage	Moved stockpile	Complete	05/04/2018	Reported to Agency Ref:LR034726
14/06/2018	Dust		Complaint about dust blowing into their house and property	No peat production adjacent to the homeowner in question	Complete	15/06/2018	Reported to the Agency Ref:LR035599
25/08/2018	Dust		Complaint about dust blowing into their house and property	Employees reminded of their environmental training.	Complete	25/08/2018	Reported to the Agency Ref:LR036695
	SELECT				SELECT		
	SELECT				SELECT		

Total complaints open at start of reporting year	0
Total new complaints received during reporting year	3
Total complaints closed during reporting year	3
Balance of complaints end of reporting year	0

Complaints and Incidents summary template Lic No: P0501-01 Year 2018

Incidents

		Additional information
Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	Yes	

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
16/02/2018	Trigger level reached	Lisclogher SW-20	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014018	New	Investigate	None Required	Complete	07/03/2018	Low
05/04/2018	Spillage	Toar Bog	1. Minor	Ground	Other (add details)	Plant or equipment breakdown	Normal activities	EPA INCI014221	New	Investigate	Material excavated and removed. Incident reporting re-emphasised to all personnel.	Complete	05/04/2018	Low
24/04/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014395	New	Investigate	None Required	Complete	15/05/2018	Medium
07/06/2018	Trigger level reached	Ballivor Bog SW-35	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014714	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Ballivor Bog SW-38	1. Minor	Water	Other (add	Unknown	Normal activities	EPA INCI014715	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Ballivor Bog SW-39	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014716	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Ballivor Bog SW-40	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014717	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Ballivor Bog SW-41	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014719	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Carranstown Bog SW-31	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014720	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Carranstown Bog SW-32	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014732	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Carranstown Bog SW-33	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014733	New	Investigate	None Required	Complete	02/07/2018	Medium
07/06/2018	Trigger level reached	Carranstown Bog SW-34	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014734	New	Investigate	None Required	Complete	02/07/2018	Medium
12/06/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014736	Recurring	Investigate	None Required	Complete	02/07/2018	Medium
26/06/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI014737	New	Investigate	None Required	Complete	02/07/2018	Medium
01/10/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015376	Recurring	Investigate	None Required	Complete	18/10/2018	Medium
11/10/2018	Trigger level reached	Ballybeg Bog SW-12	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015377	New	Investigate	None Required	Complete	18/10/2018	Medium
11/10/2018	Trigger level reached	Ballybeg Bog SW-13	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015378	New	Investigate	None Required	Complete	18/10/2018	Medium
11/10/2018	Trigger level reached	Ballybeg Bog SW-13A	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015379	New	Investigate	None Required	Complete	18/10/2018	Medium
11/10/2018	Trigger level reached	Toar Bog SW-14	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015380	New	Investigate	None Required	Complete	18/10/2018	Medium
15/10/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015381	Recurring	Investigate	None Required	Complete	18/10/2018	Medium
24/09/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015382	Recurring	Investigate	None Required	Complete	25/09/2018	Medium
06/11/2018	Trigger level reached	Rossan Bog SW-43	1. Minor	Water	Other (add details)	Unknown	Normal activities	EPA INCI015641	Recurring	Investigate	None Required	Complete	05/12/2018	Medium
Total number of incidents current year	22													
Total number of incidents previous year	6													
% reduction/ increase	366%													

WASTE SUMMARY	Lic No:	P0501-01	Year	2018
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		PRTR facility logon	dropdown list click to see options	

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	N/A	
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	N/A	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	N/A	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4	Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite	SELECT	
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	SELECT	
6	Does your facility have relevant nuisance controls in place?	SELECT	
7	Do you have an odour management system in place for your facility? If no why?	SELECT	
8	Do you maintain a sludge register on site?	SELECT	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments

WASTE SUMMARY	Lic No:	P0501-01	Year	2018

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	

Table 4 Environmental monitoring-landfill only Landfill Manual-Monitoring Standards

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	SELECT
10	Is leachate released to surface water? If yes please complete leachate mass load information below	SELECT

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
			SELECT	

Waste Summary Continued	Lic No:	P0501-01	Year	2018

European Waste Code (EWC)	Description of Waste (in line with applicable EWC code)	Hazardous - Yes/No	Quantity (Tonnes)	Name & Permit No. of Agent/Carrier	Treatment Type – Recovered / Disposed / Recycled	Name, Address & Licence/Permit No. of FINAL Destination	Location of Treatment - Country
02 01 04	waste plastics (except packaging)	No	80.9	ADN Materials Ltd.WFP-MN-12-0001-04	R05 - Recycling/reclamation of other inorganic materials	ADN Materials Ltd., Lossetts, Carrickmacross, Co. Monaghan - WFP-MN-12-0001-04	Ireland
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Yes	1	Enva Ireland Limited (Portlaoise) - W0184	R02 - Solvent reclamation/regeneration	Recyfuel Ltd., Enghis - BE0459.735.458	Belgium
11 01 13*	degreasing wastes containing hazardous substances	Yes	0.27	Safety Kleen Ireland Ltd - W0099	R11 - Use of waste obtained from any of the operations numbered R 1 to R 10	Solvent Recovery Management, PP33345F, Wheeland Rd., Knottingly, West Yorks	UK
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils	Yes	10.37	Enva Ireland Limited (Portlaoise) - W0184	R01 - Use principally as a fuel or other means to generate energy	Enva Ireland Limited, Clonminam Industrial Estate, Portlaoise - W0184	Ireland
13 05 03*	interceptor sludges	Yes	46.14	Enva Ireland Limited (Portlaoise) - W0184	R01 - Use principally as a fuel or other means to generate energy	Enva Ireland Limited, Clonminam Industrial Estate, Portlaoise - W0184	Ireland
15 01 03	wooden packaging	No	12.08	AES Ltd WP-OY-08-601-01	R01 - Use principally as a fuel or other means to generate energy	AES LTD, Cappincur, Tullamore, Co. Offaly - WP-OY-08-601-01	Ireland
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	Yes	1.01	Enva Ireland Limited (Portlaoise) - W0184	R01 - Use principally as a fuel or other means to generate energy	Lindenschmidt, Kreutzal - Reg No: E97095037	Germany
16 01 07*	oil filters	Yes	1.06	Enva Ireland Limited (Portlaoise) - W0184	R04 - Recycling/reclamation of metals and metal compounds	R.D. Recycling, Houthalen, Reg No: 51727/1KD	Belgium
16 06 01*	lead batteries	Yes	0.96	Enva Ireland Limited (Portlaoise) - W0184	R04 - Recycling/reclamation of metals and metal compounds	Campine Recycling, Beerse - MLAV/05173/GVDA	Belgium
17 04 07	mixed metals	No	57.78	AES Ltd WP-OY-08-601-01	R04 - Recycling/reclamation of metals and metal compounds	AES LTD, Cappincur, Tullamore, Co. Offaly - WP-OY-08-601-01	Ireland
20 03 01 A	Municipal mixed residual household	No	5.79	AES Ltd WP-OY-08-601-01	D05 - Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)	AES LTD, Cappincur, Tullamore, Co. Offaly - WP-OY-08-601-01	Ireland
20 03 01 B	Municipal mixed residual non-household	No	20.62	AES Ltd WP-OY-08-601-01	D05 - Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)	AES LTD, Cappincur, Tullamore, Co. Offaly - WP-OY-08-601-01	Ireland
17 05 03*	soil and stones containing hazardous substances	Yes	31.98	Enva Ireland Limited (Portlaoise) - W0184	D10 - Incineration on land	Enva Ireland Limited, Clonminam Industrial Estate, Portlaoise - W0184	Ireland

Derrygreenagh

Decommissioning and Rehabilitation
Bog Rehabilitation Progress Report 2018.

Within the Derrygreenagh licensed area (P0501-01) there were no entire bog units available for rehabilitation in 2018. Ongoing monitoring of cutaway within the Derrygreenagh licensing area included the re-survey of Drumman bog.
Monitoring of cutaway sites within the Derrygreenagh Bog Group is ongoing with Lisclogher East re-surveyed in 2018. The surveys comprised of baseline walkover surveys to identify and map pioneer and established habitats on the cutaway and to assess the condition of raised bog remnants along bog margins.

Some fertiliser (Ground Rock Phosphate) was applied to an area within Derryarkin Bog in 2018 to speed up natural recolonization, as part of the rehabilitation plan for this bog.

Bog restoration and drain-blocking is being carried out at a remnant section of high bog at Daingean Rathdrum. This work was completed in 2018.

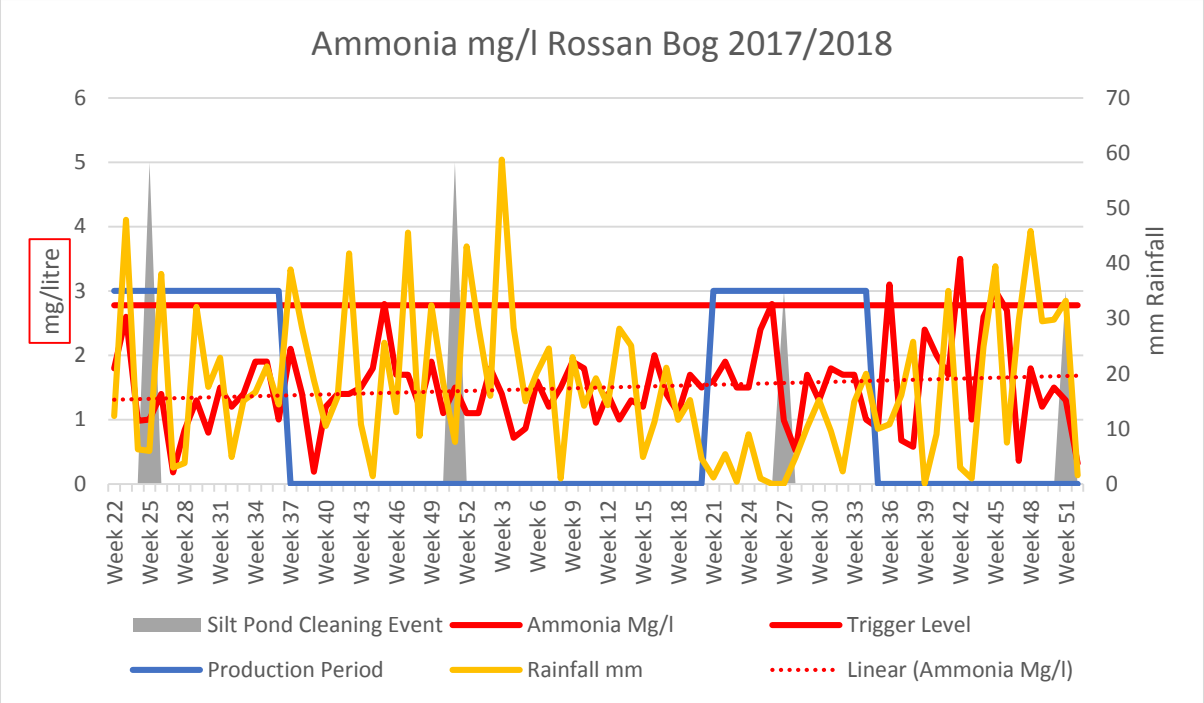
Draft rehabilitation plans for the Derrygreenagh bogs licensed area, including more detailed draft plans for each component bog unit were submitted to the EPA in 2013 and these were reviewed and updated in 2015, and 2017.

The new Biodiversity Action Plan (2016-2021) was launched in 2016 with the annual Biodiversity Action Plan review day being held in February 2017, this included an update on the progress of this plan, bog restoration and cutaway rehabilitation for a wide range on statutory and non-statutory consultees including members of the EPA, NPWS, BWI, Bord na Mona, Coillte, Inland Fisheries Ireland, An Taisce, IPCC, Irish Red Grouse Association, Irish Wildlife Trust, NARGC, local game councils, Midland Regional Planning Authority as well as a range of local community groups and Heritage Officers from counties Laois, Offaly, Kildare, Roscommon, Longford, Meath, Galway, Westmeath and Dublin.

A copy of our Biodiversity Action Plan is available to view and download at http://www.bordnamona.ie/our-company/biodiversity/

As required by condition *10.2 Cutaway Bog Rehabilitation Plans*, draft peatland rehabilitation plans for all the individual bog units were submitted to the agency in 2013, reviewed and amended in 2015 and re-submitted to the agency in 2015. All draft rehabilitation plans have been reviewed in 2017. These reviewed and amended plans will be re-submitted to the agency in due course.
Organic certification was sought for the majority of the Bord na Móna property with the aim of using some areas for the cultivation of plants for use in herbal medicine, this project is ongoing.

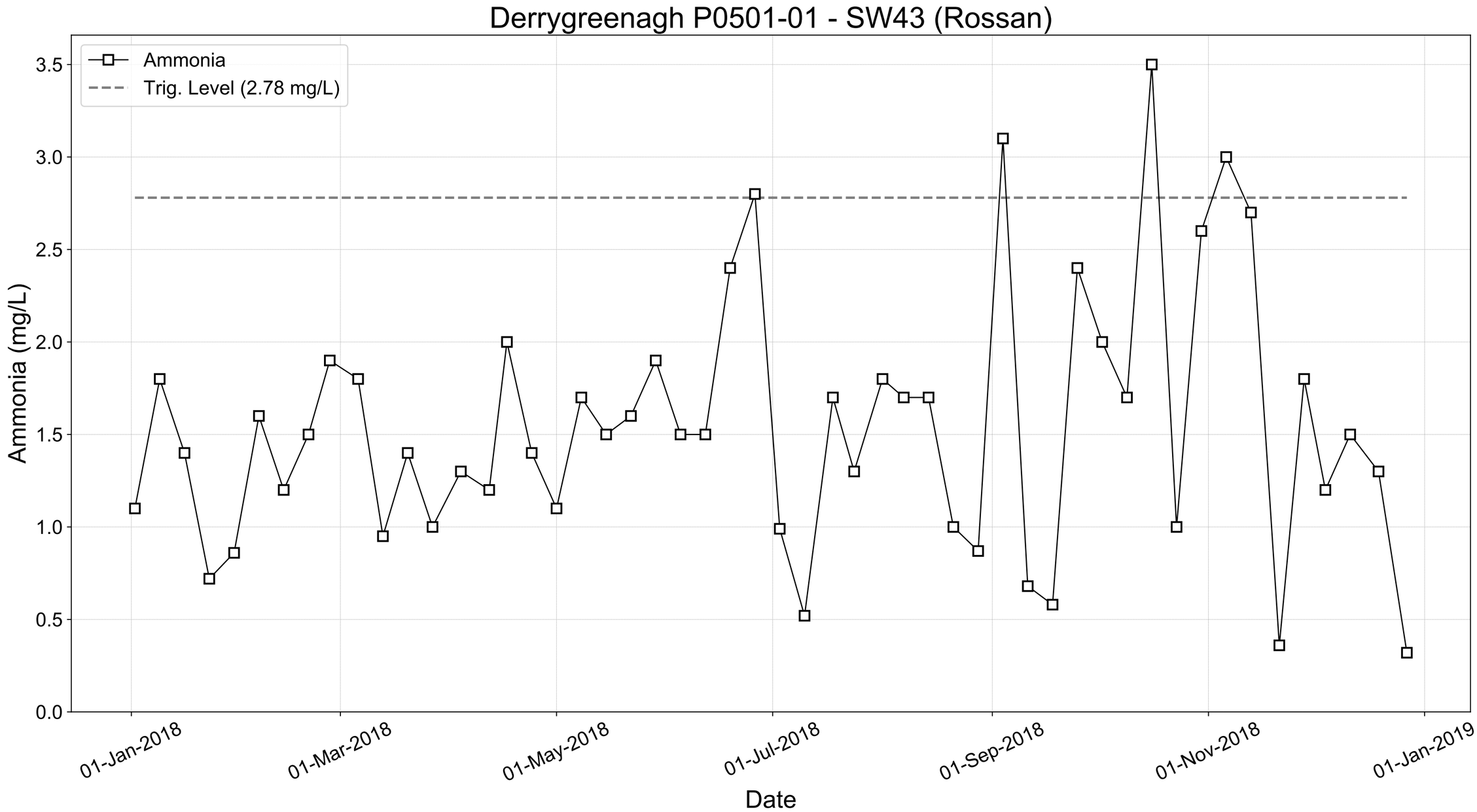
Bord na Mona Derrygreenagh PO501-01												
Grab Sampling 2018												
X	Y	Bog	SW	Monitoring	Sampled	pH	SS	TS	Ammonia	TP	COD	Colour
262436.96	258824.82	Lisclogher	SW-19	Q1 18	16/02/2018	6.8	5	124	0.1	0.05	72	340
262935.72	258722.5	Lisclogher	SW-20	Q1 18	16/02/2018	5.8	5	160	0.14	0.05	119	548
262969.12	258691.34	Lisclogher	SW-21	Q1 18	16/02/2018	5.4	5	116	0.11	0.05	96	417
263432.94	258465.16	Lisclogher	SW-22	Q1 18	16/02/2018	6.9	5	164	0.96	0.05	93	544
263467.21	258446.56	Lisclogher	SW-23	Q1 18	16/02/2018	7.3	5	196	1.6	0.06	82	399
263740.8	258367.96	Lisclogher	SW-24	Q1 18	16/02/2018	4.3	5	60	0.09	0.05	47	212
266022.62	259613.57	Lisclogher	SW-25	Q1 18	20/02/2018	7.4	5	358	2.9	0.12	85	277
260583.98	256514.28	Bracklin	SW-26	Q1 18	16/02/2018	6.4	5	96	0.71	0.06	57	191
260609.41	256526.33	Bracklin	SW-27	Q1 18	16/02/2018	7.1	5	224	1.6	0.05	72	326
263649.63	255035.41	Carranstown	SW-31	Q2 18	07/06/2018	7.6	5	171	0.03	0.05	126	230
265553.99	255989.11	Carranstown	SW-32	Q2 18	07/06/2018	7.6	5	394	0.54	0.1	140	176
265632.83	254865.04	Carranstown	SW-33	Q2 18	07/06/2018	7.1	35	414	2.8	0.65	124	178
265886.95	254984.18	Carranstown	SW-34	Q2 18	07/06/2018	7.4	12	432	0.99	0.12	142	272
265140.06	254114.54	Ballivor	SW-35	Q2 18	07/06/2018	7.7	15	476	0.06	0.09	144	242
265878.97	253506.58	Ballivor	SW-38	Q2 18	07/06/2018	8	8	212	0.24	0.08	136	238
265888.99	253456.63	Ballivor	SW-39	Q2 18	07/06/2018	7.9	5	286	0.07	0.11	115	104
266366.86	251598.58	Ballivor	SW-40	Q2 18	07/06/2018	7.6	9	436	1.6	0.12	124	134
266386.45	251579.18	Ballivor	SW-41	Q2 18	07/06/2018	7.8	6	356	0.02	0.07	110	102
255381.16	243606.05	Derryhinch	SW-1	Q3 18	10/09/2018	7.7	7	344	0.51	0.09	78	95
254528.83	242354.28	Derryhinch	SW-2	Q3 18	10/09/2018	7.6	5	228	1.1	0.06	61	119
253369.19	242417.94	Derryhinch	SW-3	Q3 18	10/09/2018	7.7	5	214	2.3	0.05	49	201
252602.78	242540.17	Derryhinch	SW-4	Q3 18	10/09/2018	7.8	5	432	0.08	0.05	52	105
252623.61	241470.16	Carrick	SW-4A	Q3 18	10/09/2018	7.9	5	288	0.95	0.05	61	227
252468.68	240919.32	Carrick	SW-5	Q3 18	10/09/2018	7.5	5	394	0.09	0.05	42	59
252409.71	241163.33	Carrick	SW-6	Q3 18	10/09/2018	7.6	5	462	0.1	0.05	42	66
252473.21	241162.01	Carrick	SW-7	Q3 18	10/09/2018	7.6	5	462	0.09	0.06	42	142
252275.61	239871.62	Drumman	SW-8	Q3 18	10/09/2018	8	5	366	0.35	0.05	50	166
252950.37	238421.69	Drumman	SW-9	Q3 18	10/09/2018	7.5	5	240	0.04	0.07	62	146
251559.92	235341.71	Ballybeg	SW-11	Q4 18	15/10/2018	7.2	5	418	0.12	0.05	61	119
252206.09	235207.02	Ballybeg	SW-12	Q4 18	15/10/2018	7.1	5	358	3	0.05	83	213
251880.6	234593.13	Ballybeg	SW-13	Q4 18	15/10/2018	7.3	5	368	3.7	0.05	74	184
252250.49	235061.45	Ballybeg	SW-13A	Q4 18	15/10/2018	7.2	5	402	3	0.05	71	148
240485.16	235706.33	Toar	SW-14	Q4 18	11/10/2018	7.2	14	396	3.2	0.05	35	42
244391.76	235128.93	Toar	SW-15	Q4 18	11/10/2018	7.5	9	418	0.42	0.05	37	44
244435.64	235093.42	Toar	SW-16	Q4 18	11/10/2018	7.8	5	452	0.15	0.25	44	59
240425.65	234997.32	Toar	SW-17	Q4 18	11/10/2018	8.1	5	328	0.02	0.1	10	32
259415.3	256855.75	Bracklin	SW-29	Q4 18	15/10/2018	7	5	164	2.6	0.28	91	345
259519.45	257618.44	Bracklin	SW-30	Q4 18	15/10/2018	6.6	5	136	2.4	0.05	95	90

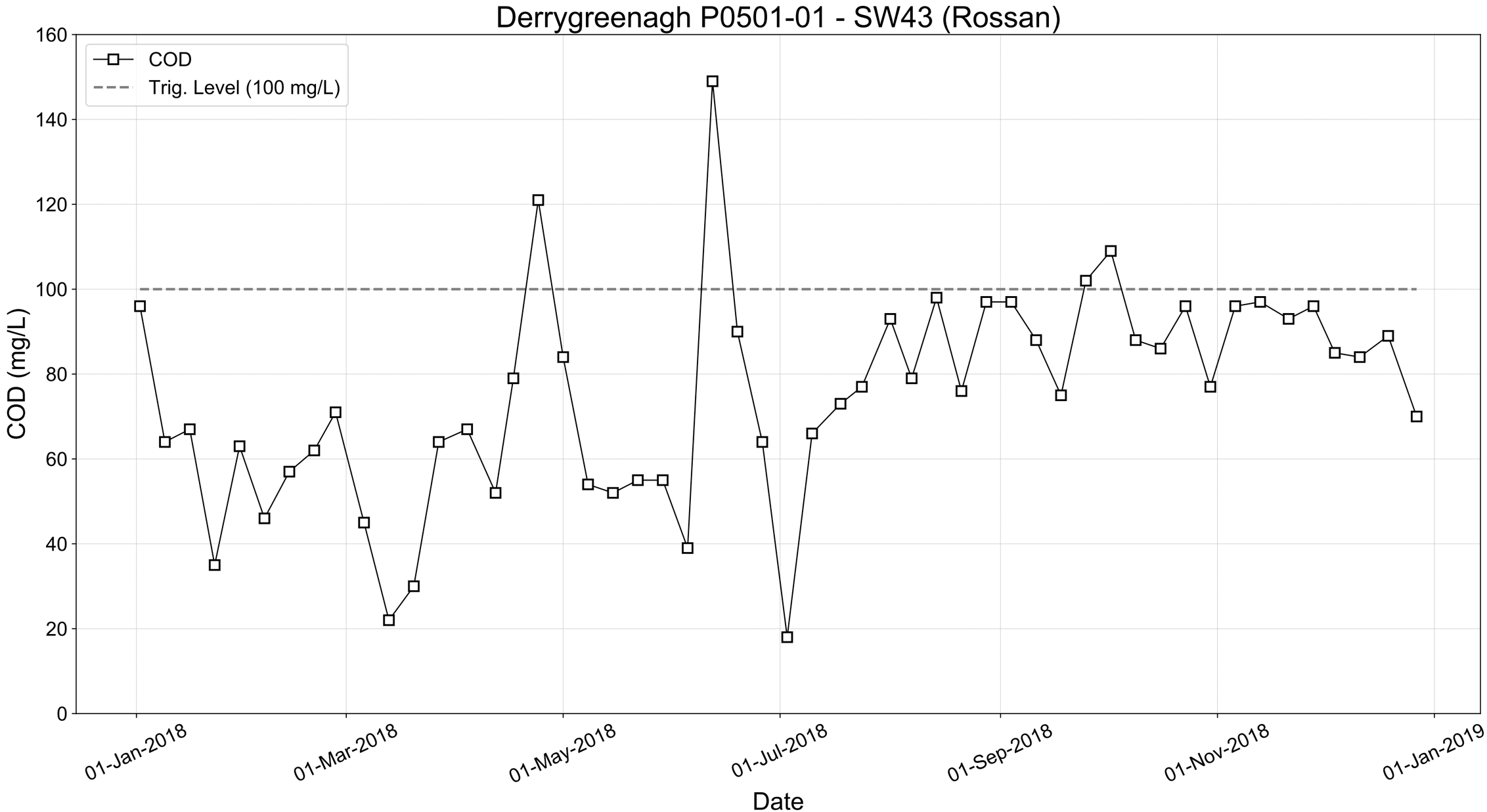


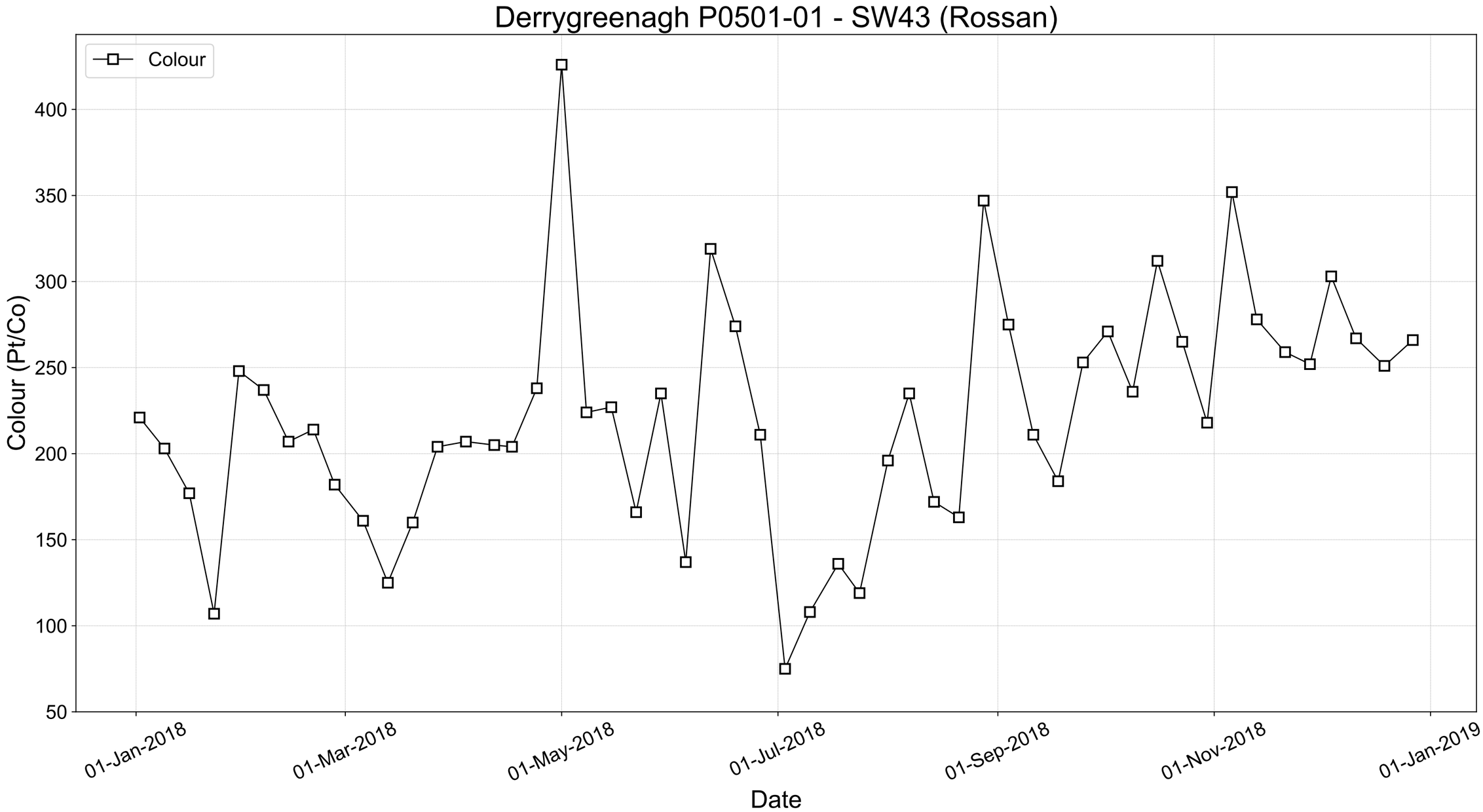
Rossan bog is an active horticultural production bog with the composite sampler located here from May 2017 where it was moved from Toar Bog within the Derrygreenagh IPC Licence. The composite sampler takes a flow proportional composite sample over a 24 hour period. The sampler had 0% downtime during this reporting period and returned 52 weekly ammonia results during the period. The ammonia trigger level of 2.78mg/l, as agreed with the Agency, was exceeded four times during the period, all reported to the Agency. Overall the sampling period of 82 weeks showed a slightly increasing trend in ammonia.

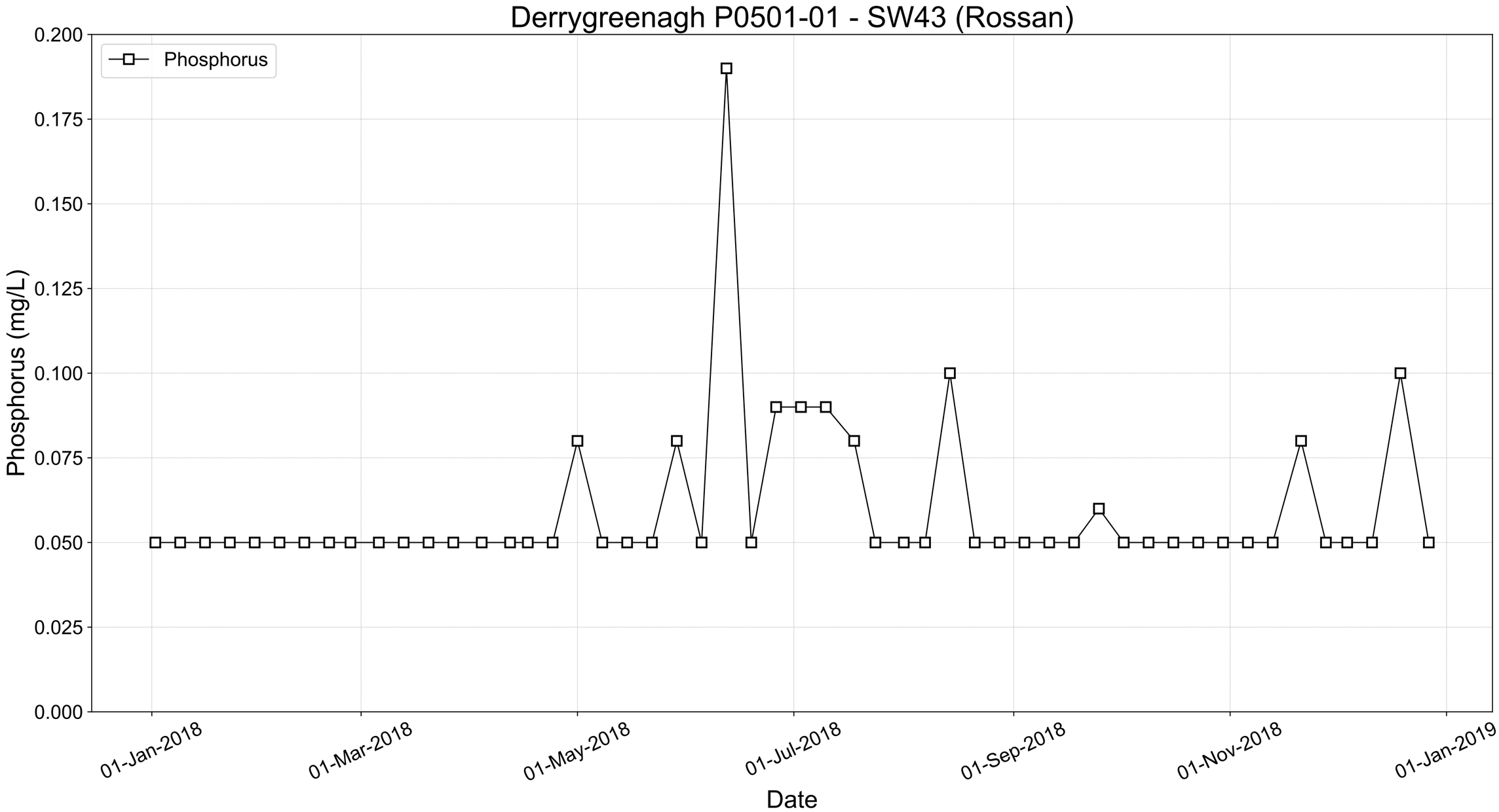
There is no obvious link between the summer production, winter maintenance, or silt pond maintenance events on the concentration of Ammonia discharging from this peatland. The only link expected would be that related to rainfall events and seasonal weather patterns and the subsequent surfacewater runoff and associated ammonia concentrations.

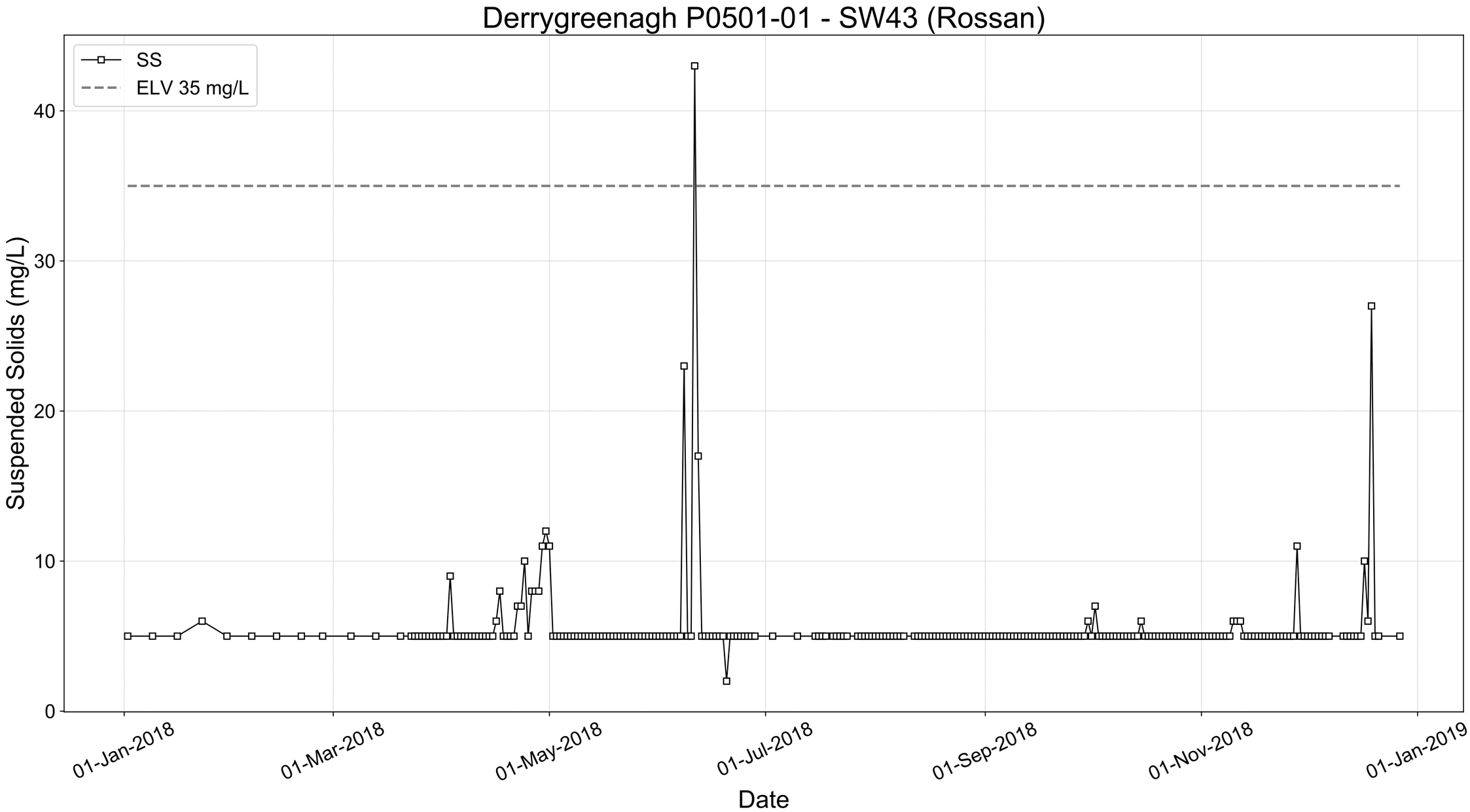
The sampler at this location may be relocated to fill any information gaps on other peatland catchments and to reflect the need to support the information gathering required for the Water Framework Directive's River Basin Management Plan. There is also an EPA lead research project commencing in 2019, called the SWAMP project, whose aims are to appraise and understand the nutrient impact from peatlands, to evaluate treatment technologies and to propose predictive tools for watershed management.

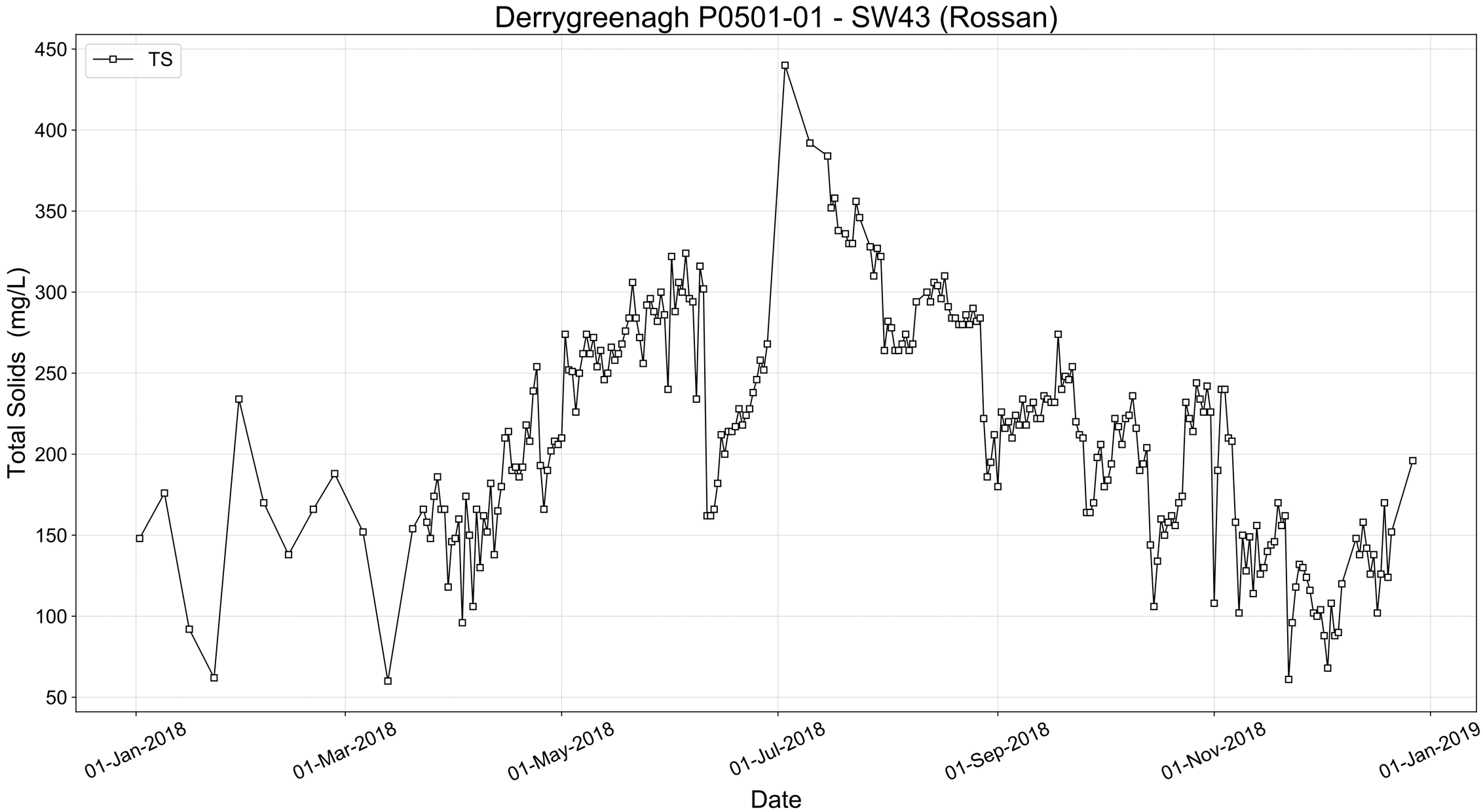

Derrygreenagh P0501-01 - SW43 (Rossan)
Ammonia
Trig. Level (2.78 mg/L)
Ammonia (mg/L)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date

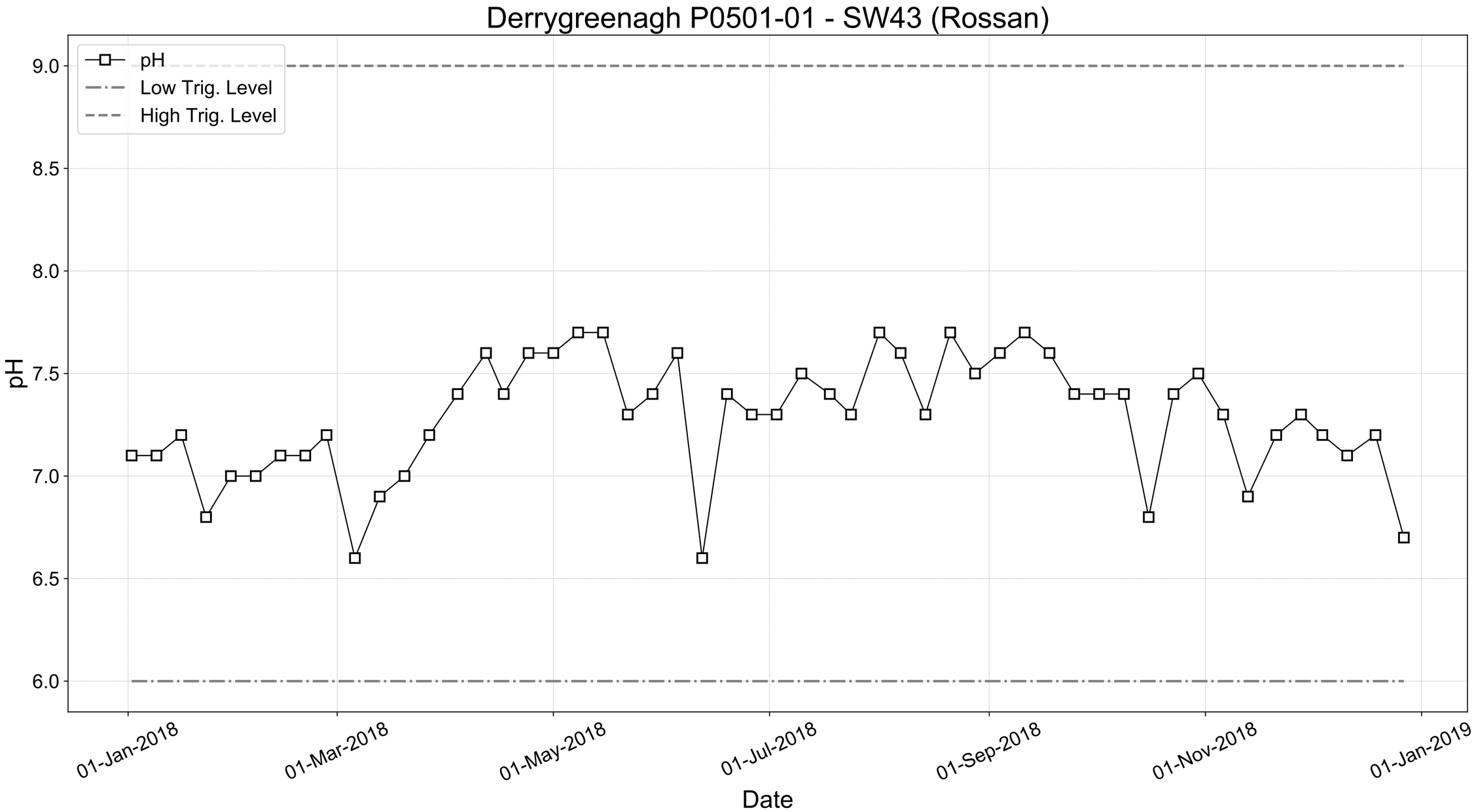

Derrygreenagh P0501-01 - SW43 (Rossan)
COD
Trig. Level (100 mg/L)
COD (mg/L)
0
20
40
60
80
100
120
140
160
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date


Derrygreenagh P0501-01 - SW43 (Rossan)
Colour
Colour (Pt/Co)
400
350
300
250
200
150
100
50
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date


Derrygreenagh P0501-01 - SW43 (Rossan)
Phosphorus
Phosphorus (mg/L)
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date


Derrygreenagh P0501-01 - SW43 (Rossan)
SS
ELV 35 mg/L
Suspended Solids (mg/L)
0
10
20
30
40
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date


Derrygreenagh P0501-01 - SW43 (Rossan)
TS
Total Solids (mg/L)
450
400
350
300
250
200
150
100
50
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date


Derrygreenagh P0501-01 - SW43 (Rossan)
pH
Low Trig. Level
High Trig. Level
9.0
8.5
8.0
7.5
7.0
6.5
6.0
pH
01-Jan-2018
01-Mar-2018
01-May-2018
01-Jul-2018
01-Sep-2018
01-Nov-2018
01-Jan-2019
Date

Yard Discharge Results 2018		
Licence: P0501-01		
Works: Derrygreenagh		
Month	**D/Greenagh SWE 2 COD**	**Rossan SWE 1 COD**
Jan	49	52
Feb	18	56
Mar	18	29
Apr	32	53
May	10	48
June	0	0
July	0	0
Aug	0	0
Sep	40	68
Oct	10	21
Nov	21	60
Dec	34	21

Note: 0 denotes no flow at emission point on day of sampling

Extractive Waste Management Plan Implementation AER Update.

March 2019.

IPC Licence P0501-01.

1.0 Extractive Wastes.

Waste classified as extractive waste from peat extraction operations arise from two operations associated with this activity.

- Silt Pond excavations and maintenance
- Bog Timbers

There has been no change to the type and nature of these two waste streams and no new waste streams added to this list. These wastes streams continue to be stored and maintained at between 1 and 3 metres in height.

2.0 Condition 7.5 Extractive Waste Management

- An extractive waste management plan (EWMP) was submitted to the Agency in September 2012 and was approved.
- The EWMP was reviewed in September 2017. There were no substantial changes to the operation of the plan, associated waste facilities or to the waste deposited.

3.0 Minimisation

- The IPC Licence has various conditions that require the installation, inspections and maintenance of silt ponds for operational areas and as such these requirements dictate the need for silt ponds and associated excavation materials and cleanings.
- Bog timbers arise from the active production footprint and are naturally occurring. The active footprint is dictated by the peat production targets and customer supply contract and service level agreements.

4.0 Treatment

- Silt pond excavation and maintenance materials do not require any treatment and are stored as per the EWMP, adjacent to the associated silt pond.
- There is no treatment of bog timbers arising and these are stockpiled at various locations in associated bogs.

5.0 Recovery

- As per the EWMP, there is still no opportunity to recover these silt pond associated materials
- Bog timbers stored on the bog are natural to the peat bog and while there have been trails to recover this waste material, these have not proved viable.

6.0 Disposal

- Silt pond cleanings continue to be disposed of adjacent to the associated silt pond and will be incorporated back into the rehabilitation plans for these bogs, post production and decommissioning.
- Bog timbers will continue to be stockpiled at suitable locations to be either incorporated back into the bog, as a supply of bog timbers for the crafting industry or will continue to decay naturally.