

Compliance Assessment Report CAR_NRW0042994

Permit being assessed: BR97151B.

For: Newport Chemical Complex, **held by:** Solutia UK Ltd

At: Corporation Road , Newport, South Wales, NP19 4XF.

Type of assessment: Site Inspection,

Reason: Incident Response (Incident number 2308959).

On: 17/11/2023 between 12:00 and 17:30.

Parts of permit assessed: Schedule 5 Notification - Effluent Treatment Plant pipeline failure.

NRW Lead Officer: Rebecca Green.

Report sent to: Environmental Specialist, Solutia UK Ltd, on 25/06/2024.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	C2 Significant	3.2.3 Containment, failure of ETP pipeline
IR3E - Installations - Emissions and monitoring - Monitoring	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR4C - Installations - Information - Notification	Assessed (A)	

Result types are explained in more detail in the 'Important Information' section below.

Total non-compliances recorded	Total non-compliance score
1	31

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
IR3B	Repair pipeline. Establish cause of failure.	Already

Criteria	Action needed	Complete by
		completed
IR3E	Quarterly water monitoring and analysis of nearby reens to confirm efficacy of remediation and containment.	31/01/2025
IR1A	1. Operator to assess integrity of remainder of pipeline. 2. Prepare options appraisal and share with NRW. Inform NRW of proposed course of action by due date.	31/12/2024

Compliance criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

At 22:22 on 16th November 2023 Solutia informed Natural Resources Wales (NRW), via the Incident Communications Centre (ICC), that there had been a significant leak from their effluent discharge pipe running through Traston Meadows (grid reference ST3419285665). An area was flooded and smelt strongly of effluent. Solutia personnel were on site and the whole Solutia manufacturing operation had been shut down to prevent further discharge from the effluent treatment plant. The Schedule 5A Notification was received on 17th November 2024. Footpaths were closed and the public excluded from the meadow. The leak site was visited on 17th November 2023 by the Lead Specialist, Industry Regulation South East (IRSE) and Rebecca Green, Site Officer for Solutia, IRSE.

On entering the site there was a noticeable odour, characteristic of the treated effluent discharged by Solutia. The ground was very wet, due to the recent high rainfall. There were two holes at the site of the leak, both filled with water, two adjacent grips and a downstream reen also contained similar water all with the characteristic odour. All were sampled by NRW for laboratory analysis, along with an upstream reen near the car park as a reference sample.

Solutia had already instigated a comprehensive sampling and analysis regime, using their own laboratories and their environmental consultants.

Contractors were on site with Solutia's incident team, discussing how to deal with the leak, any contamination and the repair of the pipe. The initial repair plan was as follows -

- Remove water from holes and grips, storing it in tanks situated by the car park, on hardstanding, to await collection by a licensed waste disposal contractor. Any water released during the excavation to be pumped here and dealt with in the same way. All water was

removed from the site in a timely manner.

- Excavate area to reveal pipe and locate failed section. 100m³ of soil was removed and was sent for disposal after analysis. No contaminants of concern were found and it was classified as inert waste. Soil samples were also taken from the side wall and bottom of the trench. These did not show any contaminants of concern. The affected section showed a long split on the underside of the pipe. This section was removed and sent to a specialist laboratory for failure analysis. The investigation revealed that the failure was due to graphitic corrosion, which would not have been revealed during ultrasound checks because the overall material thickness does not change and it tends to occur on the bottom of pipes. It is the integrity of the metal that is affected.
- Camera survey of adjacent pipe, 180m upstream and 180m downstream of the failed section. The camera survey was carried out for 300m towards the sea and for 150m upstream. No faults were seen and the pipe appeared to be in good condition.
- Cut four new inspection hatches 180m apart. This could not be done because there was too much water in the reens.
- Insert new section, supported underneath with aggregate. Leak check. Re-connect cathodic protection and ensure that it is fully functional. The effluent treatment plant was re-started on 27th November 2023 and no leaks were seen in the repaired section.
- Fill the trench with new aggregate and fresh topsoil. Gwent Wildlife Trust requested that no re-seeding be carried out.
- Exclude unauthorised personnel from the excavated area with harris fencing until August 2024 so that the ground can recover and to ensure there is no risk to animals. By April 2024 the ground had largely recovered, showing regrowth of grasses and other plants.
- Continue water sampling and analysis regime until January 2024.

Water samples were taken from the flooded areas, reens and an upstream reen by Solutia's environmental consultants on 17th November 2023 and analysed by Solutia. Formaldehyde was detected above the emission limit value (ELV) for discharges to water at three points adjacent to the area of the burst. PCB was detected above the ELV at one point downstream from the burst.

Samples taken on 21st November 2023 showed that levels at all points had reduced to below the ELVs. A weekly sampling regime was instigated. This ran from 30th November 2023 to 4th January 2024 and was carried out by Solutia's environmental consultants. Samples were analysed by ISO17025 and MCERTS accredited laboratories.

Following screening of all the results by the environmental consultants, despite some marginally elevated concentrations of isolated compounds, no exceedances of the appropriate surface water or soil generic assessment criteria (GAC) were detected and no PCB impact was identified as all results were less than the limit of detection (LOD).

It appears that any contamination was confined to the immediate area of the burst and did not migrate into the reens. Any residual contaminants in the excavated soil would not have been able to migrate because it was removed and sent for disposal.

Following the results of the failure mechanism investigation it is most important that Solutia assess the condition of the rest of this pipeline because it poses a significant risk to the environment. They must endeavour to prevent a recurrence. **See Action IR3A above.** NRW appreciate that this will be difficult and costly, but there are specialist companies who have experience in surveying pipelines of this nature and length.

Solutia are reviewing their emergency response procedures for leaks from the pipeline discharging

from the effluent treatment plant and NRW may audit these at a later date.

Solutia have been issued with a Cat 2 non-compliance because this incident was classified as significant as it had the potential to have a significant impact or effect on the environment, people and/or property. It was an unpermitted discharge into a Site of Special Scientific Interest (SSSI) which could have caused significant damage to the SSSI.

A warning letter for this non-compliance is to follow. Warnings may influence future enforcement response for continued or further non-compliance such as future ETP pipeline failures. This does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue, such as that revealed through action IRE3, above.

This was a significant incident, but Solutia responded quickly and in a responsible manner. All affected groups were informed promptly and the area was fenced off to prevent unauthorised access. The repair was carried out quickly and to a high standard. NRW appreciate the open communication that developed between them, all Solutia personnel, the civil engineering contractors and the environmental consultants. It was reassuring to see real teamwork in operation at such a difficult time.

END.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

If your assessment result in Section 1 is suspended, what does this mean?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or

suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within twenty working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 to 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.