

Compliance Assessment Report CAR_NRW0039624

Permit being assessed: BR9715IB.

For: Newport Chemical Complex, held by Solutia UK Ltd

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

Type of assessment carried out: Audit, Reason: Routine.

On 23/03/2022 between 10:00 and 13:45.

Parts of permit assessed: 1.1, 1.2, 3.2, 4.3,

NRW Lead Officer: Gareth Richards, accompanied by Wayne Grimstead.

Report sent to: Steve Thomas/David Rudd, Environment Manager on 30/03/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B3 - Infrastructure - Site drainage engineering (clean and foul)	Assessed (A)	
C2 - General Management - Management system and operating procedures	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Assessed (A)	
H2 - Resource Efficiency - Energy efficiency	Assessed (A)	

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

Total number of non-compliances recorded	Total non-compliance score
0	0

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?

No action required.

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.

At this time, we do not intend to take any further action.

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

This was a routine inspection visit by NRW but with the main objectives of; discussing and viewing the proposed temporary discharge route for surface water as part of the effluent pipeline replacement project, follow up to CAR responses to Schedule 5s, and other permit conditions. It was also a valuable familiarisation for WG, recently appointed to the position of SE IR Team Leader. A full agenda was provided prior to the meeting.

Updates

A general introduction to the site was provided by PB. This detailed the site history, processes in operation, the environmental, safety and management standards, workforce and business prospects.

NRW gave an update on changes affecting the SE IR Team, the Strategic Review of Charges (SROC) project and the current situation regarding the former European BREF process that would be superseded by UK BAT.

The SROC will be completed, and adopted, for permit application charges first. Subsistence charges will follow approx. six months later. NRW will need to consult on the changes prior to adoption. Details of the new regime were not yet finalised, but it is currently planned that the first stage will be implemented during FY 22/23.

The European BREF review for 'Common Waste Gas Management and Treatment Systems in the Chemical Sector' was expected to initiate permit review for chemical sector installations in Wales. The European Union Joint Research Centre published a final draft on 10th March 2022. Following Brexit there will be a UK BREF process. This is unlikely to differ significantly but will necessitate publication of a separate UK BREF document that will be used for the review process. This is expected 6-12 months after publication of the EU document. This will initiate permit review (a Reg 61 Notice will be issued to Solutia) and adoption of BAT within the normal 4 year period will be required.

It was confirmed that there were currently no proposed changes to the installation that would necessitate any permit variations.

Replacement of effluent pipe

The effluent pipeline replacement project was discussed in detail. Many aspects were outside the installation permit regulatory framework and fell under other permitting regimes, these were being progressed through other appropriate contacts in NRW and NCC Planning. Critical elements of the programme remained to be finalised, one of these is ground investigation on the beach. The plan is to install the replacement pipe between 2 – 2.5m below the surface, however, this can not be finalised until the ground investigations are complete. In addition the existing route through the seawall needs to be pigged. So complete installation is now likely to be 2023. However, the initial stages and plant shut down were now scheduled for 12-19 August 2022, this would be the period when the temporary discharge route for site surface water would need to be available.

It was confirmed that NRW would approve use of the proposed route direct to the Usk. This would be done under a separate CAR form. Solutia had completed a visual check of the route and were

aware that some minor clearance work would be required. This included clearing the culvert under the rail track and Corporation Road together with removal of a shopping trolley on the subsequent exposed section. It was confirmed that NRW would require Solutia to complete a final visual check prior to use of the route, no flow check would be necessary. All the requirements would be detailed in the CAR form. **Action (1): NRW.**

It had already been confirmed by NRW that the proposed route external to the Solutia installation boundary was outside of our management responsibility, comment was awaited from NCC regarding their possible oversight.

Solutia Energy Efficiency Projects

In the Annual report for 2021, provided in response to Permit Condition 4.2.2, Solutia had commented that further energy efficiency projects were intended to be implemented during 2022. Further detail was sought regarding the plans, in accordance with the requirements of Permit Condition 1.2.1, and these were described in summary.

Solutia are following an 'Energy and CO2 roadmap' for the period 2020-30. This details an ambitious but very conscientious objective, to reduce energy consumption by 32% by 2030 through a combination of measures. This is on top of the many measures that have already been implemented including the on site wind generation capability.

The most significant project is the steam vent project on 2075. However, it is also challenging and will require a significant amount of design, engineered infrastructure and funding. The majority of the work would be completed in Q4 2022. There are smaller projects that are ongoing and include variable speed control on air compressors and an improved control system for the on site electrical generation so that unnecessary export is avoided. Overall Solutia are well aware that the benefits of energy saving projects are significant and through the existence of an active 10 year plan their commitment to make continual improvements is evident and commendable.

Integrity of existing site effluent discharge pipeline ref. CAR NRW0038692 - follow up

Solutia confirmed that effluent discharges using the existing pipeline are managed to avoid surge pressures through use of a computer controlled system, this ensures that there is a gradual rather than sudden increase in pumping pressures. Such measures should help ensure integrity of the pipeline until the replacement is operational.

Follow up to formalin spill ref. CAR NRW0039107 - follow up

It was confirmed that in response to the reported formalin spill the off loading procedure had been changed so that dry running of the pump did not occur. Evidence of this was provided although there was no separate documentation that the change had been made, which would have been good practise. **Recommendation (1): Solutia.**

Chloromethane releases

Solutia report chloromethane releases on a quarterly basis, so during each year, a value is reported for each of the four listed Dequest processes. In addition an annual cumulative mass release is reported against a permit limit. Typically this is well below the permit limit, however, there are

significant differences between the concentrations reported for the individual Dequest processes. Investigation has now confirmed that these differences are not process related but attributable to differences in the level of methanol contamination in the supplied formalin. This is determined for each formalin delivery and can be used to derive an annual cumulative release for chloromethane. Solutia therefore wish to see some changes to the reporting methodology and it was agreed that a justified request should be submitted to NRW for consideration. **Action (2): Solutia/NRW.**

Emission of substances not controlled by emission limits

Permit Condition 3.2 requires that the release of substances not controlled by emissions limits are minimised. There was insufficient time to consider this topic during the audit and it was agreed that the measures that Solutia have in place to meet this condition would be assessed and a response provided to NRW. **Action (3): Solutia.**

Site inspection

A tour of the site was hosted by DR. This included the proposed on site route for temporary pumping of surface water to reed, main processing areas (Biphenyl, incl. loading bay; Dequest; Therminol; S2075), and the reed beds.

The route on the western boundary of the site parallel to Corporation Rd was walked. Apart from redundant N2 and H2 pipework this was primarily scrub with a parallel drainage ditch. It was the intention to install temporary polypropylene pipe (100mm) along this route (~ 400m) for the temporary pumping of site surface water to a sump where a culvert passes underneath the railtrack and road. A picture was taken (copy provided to NRW) of the current condition of the sump and culvert entrance. It would need cleaning out prior to use.

The main processing areas were walked through. The biphenyl loading bay was viewed. Solutia had submitted a recent Schedule 5 Notification following a biphenyl spill. A description of the incident was provided. The investigation had not yet been finalised but the cause was considered to be due to the design of the level gauge. This had failed to actuate, resulting in a tanker overfill and spillage. Biphenyl is not liquid at ambient temperature so it had quickly solidified on the tanker and ground. There was no evidence of any residual material remaining. These level gauges had been in use for many years without incident so a full site review was taking place. The Schedule 5 Part B will be provided to NRW when the investigation is complete and necessary actions confirmed. **Action (4): Solutia.**

The reed beds were viewed. These are two small contained units used for the removal of low concentrations of PCBs and PCPs in the site surface water that originate from historic activities on the installation undertaken by a previous owner.

No issues were identified during the site inspection.

Wash up session

A short review was held with PB and DR. Identified actions were summarised (as detailed above). It was confirmed that no non-compliances had been identified during the audit.

END.

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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.

What are suspended scores?

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 and Waste action criteria (used in section 1 and 2):

A: Permitted activities

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance 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 20 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 – 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.