

Schedule 5 Notification

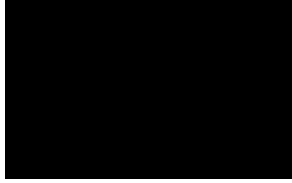
PART B

Permit Number:	BR9715IB
Name of Operator:	Solutia UK Ltd
Location of Installation:	Corporation Road, Newport, Gwent, NP194XF
Location of the emission:	TH3 (Therminol 3) 'Reflux Drum' Drain
Time and date of the emission:	12/10/23, 17:12 – 18:48

Any more accurate information on the matters for notification under Part A	Further to the event as Notified in the Part A – the following is; a summary, and main findings of the subsequent investigation: <u>Incident Statement:</u> <i>What was going on? -</i> During the start-up of the Therminol pyrolysis furnace system. Water was being drained from the bottom of the furnace feed tank (Benzene Boot) <i>What went wrong? -</i> The alignment of the process valves and the automated draining of the water phase was initiated. The Basic Process Control System and the Safety System failed to operate as expected <i>What were the consequences? -</i> A release of 4.3tonne of Benzene / Biphenyl was released into a specifically designed nitrogen inerted oil/water separation and containment tank where the release was segregated and collected <u>Summary of Root Cause items:</u> The investigation identified that there were several factors that contributed to the event – these being broadly in the categories of; - <i>Instrumentation</i> – i) Conductivity instrument did not reach its Process Control set-point as the meter had drifted ii) Outlet valve in incorrect mode preventing automatic closure on timer - <i>Design & Implementation</i> – i) Safety System setpoints not selected for all process conditions ii) Some minor changes to drain-line had not been captured in documentation
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	- <i>Management & Operation</i> – i) Incorrect positioning of drain valve - not identified via; operating procedure, checklists, and permit de-isolation
Measures taken, or intended to be taken, to prevent a recurrence of the incident	As a result of the causes listed above, the following corrective & preventative actions were identified: • Safety systems reviewed and made operational • Reaffirm the 'modification' (management of change) process • Planned maintenance. Safety System instrument calibrations reviewed • Prioritize SRS reviews (trip points) for Therminol 3 interlocks • Review of start-up operating procedure & checklist • Roll-out best practice for valve positioning & permit de-isolation recording The plant remained shut down until the instrument control systems were made operational i.e.; with the safeguards fully functioning as intended. Notable changes include; control systems modification, sensor recalibrations, modification to safety system(s) trip point, and physical isolation of drain point
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	None proposed No release from the immediate area to the environment – the interceptor system functioned as intended
The dates of any unauthorised emissions from the installation in the preceding 24 months	04/12/2023 - Effluent Cease Discharge 17/11/2023 - Effluent Pipeline Offsite 13/10/2023 - Benzene Release to Separator [This Notification] 15/09/2023 - Boiler 16 CO 29/08/2023 - Effluent Circulation Pipeline Leak 06/09/2023 - Formalin in Effluent 06/02/2023 - Dequest Amino 24/11/2022 - Effluent Cease Discharge 14/07/2022 - Effluent Hg 07/03/2022 - Biphenyl Tanker

*** Signed:**



Date: 14/12/2023

* authorised to sign on behalf of Solutia UK Ltd