Schedule 1 – 5.1.1 Notification

PART B

Permit Number:	BR9715B
Name of Operator:	Solutia UK Ltd
Location of Installation:	Corporation Road, Newport, Gwent, NP194XF
Location of the emission:	Therminol – Acetone transfer line (pump flexi hose)
Time and date of the emission:	28/10/2017, 19:30

Any more accurate information on the matters for notification under Part A	The event involved the initial hose failure, followed by a number of subsequent replacement hose ruptures (in a more controlled restart environment) whilst attempting to recommence operations. Initial investigations focused on a suspected overpressure scenario caused by pipework and relief valve blockages. However, it was later identified that there was a mechanical influence from a combination of: insufficient kink / flex for the type of hose, a failed pulsation damper, and an increased back pressure causing additional pump movement and mechanical stress Following the event also, there was evidence of a solid residue around the pump area, indicating that there was presence of some biphenyl, and (by association) benzene in addition to the acetone. The cause of this being attributed to a failed non-return valve, thereby allowing some backflow into the acetone system
Measures taken, or intended to be taken, to prevent a recurrence of the incident	The following actions were undertaken as part of the investigation: • Check pipework for blockages [Complete] • Test relief valves [Complete] • Pressure test of hoses [Complete] • Check non-return valve [Complete]

	In addition, related to the mechanical failure specifically, the following actions were identified: • Replace the hoses, with an additional 5% flex [Complete] • Replace the non-return valves on both East & West furnaces prior to restart [Complete] • Fit 4 new non-return valves. One on the discharge of each of the acetone pumps [Complete] • Review and update the TH3 critical non-return valve list, including utility and non-utility tie-ins
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
The dates of any unauthorised emissions from the installation in the preceding 24 months	30/10/2017 - Acetone Transfer Line [This Notification] 25/10/2017 - Benzene & Biphenyl 11/07/2017 - Benzene CO_2 vent 10/04/2017 - NOx on TH3 Furnaces 12/08/2016 - Benzene Transfer Line 28/06/2016 - Boiler 16 NOx emissions 23/02/2016 - Bellows Failure 26/01/2016 - W1 pumping during cease discharge 10/01/2016 - Acetic Acid pipe failure 04/01/2016 - Catch Tank Vent, HCl / Acetic release

*** Signed:**  **Date:** 20/11/2017

* authorised to sign on behalf of Solutia UK Ltd