

Appendix C3 3ci – Raw materials list – amended 30/05/18

Name of the Installation			Stoneness Road Chemicals Facility – BJ7298IF		
Schedule 1 activity	Process	Product	Raw Materials	Description of the use of the raw material including any main hazards	Raw material Volumes – weekly delivered or if delivered infrequently the bulk volume delivered
4.2 Part A(1) a)(iv)	Process 5	Ferrous chloride	Millscale* Hydrochloric acid Water*	C, R35, Xi, R37 = H290, H314 & H335	Hydrochloric acid supplied by process 3** Process 3 currently has storage for 1440m <sup>3</sup> of HCl, a further 4 x 160m <sup>3</sup> tanks are to be purchased to store extra HCl, plus 1 x 100m <sup>3</sup> intermediate tank Water from the mains supply Millscale is delivered in bulk in 4000te shipments
4.2 Part A(1) a)(iv)	Process 6	Ferric chloride	Ferrous chloride Chlorine gas Millscale* Water*	Xn, R22, Xi, R41 = H290, H302, H318 Xi, T, R23, R36/37/38, N, R50 = H280, H270, H330, H319, H335, H315, H400 & EUH071.	Ferrous chloride supplied by process 5 ** - 4 x 160m <sup>3</sup> tanks have been ordered for ferrous chloride storage. Chlorine gas provided as part of Process 3** production – Currently there are no storage facilities for Chlorine. The only storage ability will be the pipeline from Process 3 to process 5. Water from the mains supply Millscale is delivered in bulk in 4000te shipments
4.2 Part A(1) a)(iv)	Process 7	Sulphuric acid	Sulphuric acid	C, R35 = H314	Up 800 tonnes per week delivered in – 4 x 160m <sup>3</sup> storage tanks
4.2 Part A(1) a)(iv)	Process 8	PolyAluminium chloride	Hydrochloric acid  Aluminium hydrate* Water* Acid polymer	C, R35, Xi, R37 = H290, H314 & H335  C, R35 = H314	Hydrochloric acid supplied by process 3** Process 3 currently has storage for 1440m <sup>3</sup> of HCl, a further 4 x 160m <sup>3</sup> tanks are to be purchased to store extra HCl, plus 1 x 100m <sup>3</sup> intermediate tank

					Aluminium hydrate delivered in bulk in 4000te shipments Water from the mains supply Acid polymer supplied by process 7** - stored in main Sulphuric acid storage tank 10,000m3 capacity.
4.2 Part A(1) a)(v)	Process 9	Sodium silicate	Silica sand* Water* Sodium hydroxide	C. R35 = H290, H314 & H318	Sand – 125tonnes Sodium hydroxide supplied by Process 3** stored in main storage tank 10000m3 tank Water from the mains supply
4.2 Part A(1) a)(iv)	Process 10	Sodium citrate	Sodium hydroxide  Citric acid	C. R35 = H290, H314 & H318 Xi & R36 = H319	Sodium hydroxide supplied by Process 3** stored in main storage tank 10000m3 tank Water from the mains supply Citric acid delivered weekly in 12 tonne loads
4.2 Part A(1) a)(iv)	Process 11	Aluminium sulphate	Aluminium hydrate* Sulphuric acid Water*	C, R35 = H314	Aluminium hydrate delivered in bulk in 4000te deliveries Acid supplied by process 7** - stored in main Sulphuric acid storage tank 10,000m3 capacity. Water from the mains supply

\*These raw materials have not been provided with a hazardous classification in the MSDS.

\*\* These raw materials are already manufactured on site either in process 3 or the proposed process 5 and are currently supplied already supplying to the processes at the Titan Works Site (DP3637SG). The Hydrochloric acid & sodium hydroxide may have 1 intermediate tank that will hold up to 100 tonnes, but the eventual aim is to install pipe-bridge supply to these tanks, instead of delivery by lorry. So the main storage vessels for Hydrochloric acid & Sodium hydroxide are already in-situ, but additional intermediate tanks will be installed to enable constant supply.

Both the Millscale & the Aluminium hydrate come in in large bulk shipments of 4000 tonnes by boat to our site jetty.

Volumes for each plant have not been included, however total volumes for use in all of the processes is detailed below. In providing the raw material volumes in this method, there is then no requirement to apply for CinC for some of the processes. CinC would then have to be applied for, as in detailing for each process the proposed volumes of raw materials, the competition would then be able to determine, what Industrial Chemicals market share would be and then, they would be able to push Industrial Chemicals out of the market for those products.