

Surface Water Discharge Monitoring Approach

1. CAR Action

Reference:	CAR NRW0040855
Action:	Rockwool to review surface water discharge monitoring approach to address the issues identified in the OMA report.

2. Water OMA audit scores from May 2022 reviewed and ROCKWOOL responses in red font below to those that scored <3.

OMA 1: Management of monitoring		
OMA ELEMENTS	SCORE	COMMENTS
D. Monitoring records and use of monitoring data	1	The use of the emissions data appears to be retrospective and there is no reference to use of trend plots to pre-empt high concentrations occurring. There is no formal review process documented. ROCKWOOL: Water spreadsheet updated to include data in "Trends" tab. Utilities oobeya meeting attended once a week to discuss these results and identify any areas for improvement.
E. Understanding the requirements of the permit and monitoring methods	1	The permit currently requires daily flow proportional sampling with daily, weekly, or monthly testing dependant upon the determinand. Procedure 4, Section 4 "Sampling and Analysis" states that composite sampling is time proportional. This deviation from the permit requirements may have occurred because of the changed water management regime with discharge to sewer being the main disposal route but needs to be formalised because current arrangements do not comply with condition 3.5.1. An Excel spreadsheet "Environmental Training Matrix" sets out training modules relating to surface water monitoring along with dates of completion, but details of the training are not known. The training matrix represented staff on site at the time of the OMA but is now out of date due to personnel changes. ROCKWOOL: Procedure 4 updated to state flow proportional sampling. Environmental team training matrix updated. Surface water training delivered to team and the wider factory audience to raise awareness. This is to be continued this year for new starters in the Yard.

OMA 2: Periodic monitoring and test laboratories		
OMA ELEMENTS	SCORE	COMMENTS
A. Sampling provisions	1	The composite sampler probe location is not the best available due a risk of sediment been drawn in from the area around the discharge point. There is also potential for the sampled stream to contain additional flows that are not representative of the process discharge. The spot sampling container was fouled and may lead to contamination. The material of construction may not be appropriate. The sample location is safe and accessible. Storage and transport for offsite analysis are not coordinated to ensure samples are not compromised. The composite sampler maintains samples below 5oC, but the samples can be left at room temperature for 24 hours or more and sent for analysis unchilled. Polyethylene bottles are used for internal samples. Sampling procedure does not specify rinsing of bottles or details of preservation requirements ROCKWOOL: Composite sampler container to be replaced by glass alternative to be provided by supplier. Samples to be kept in fridge prior to sending for analysis and ALS contacted to agree chilled courier solution for samples. Work instruction updated to included sample bottle cleaning and new work instruction created to cover a blank procedure for internal samples.

OMA 3: Continuous monitoring		
OMA ELEMENTS	SCORE	COMMENTS
A. Provisions for monitoring and location of continuous monitors	1	This section only applies to the composite sampler and previous comments in Section 2 are applicable. Time-proportional 24-hour composite sampling is used. The suitability of this approach given the intermittent nature of the surface water discharges needs to be reviewed. Also, the permit specifies flow proportional sampling. ROCKWOOL: Procedure 4 updated to state flow proportional sampling. Monthly check added to check operation of flow meter and sample collection.
C. Do not assess for air, water only	2	The ALS certification is for monitoring techniques that are applicable to the determinands. Sample matrix sensitivity to interference is unknown. There is no internal review process to check for changes in lab accreditation or methods used. ROCKWOOL: "Environment Team Equipment Register" created to track calibrations and laboratory accreditation. To be kept on Team SharePoint and periodically reviewed at team meetings.
G. Breakdown response	2	No details of spares availability or breakdown service provided, reliance on the 2 visits is assumed to be sufficient due to the intermittent operation of the sampler. ROCKWOOL: EMS service contract 0001014366 on file. Covers unlimited email & freephone telephone support, 10% discount on replacement parts, replacement equipment loaned free of charge as a result of breakdown (for a 3-month period) and replacement consumables included.

OMA 4: Quality assurance		
OMA ELEMENTS	SCORE	COMMENTS
E. Audit compliance	2	Audit record for November 2021 records status of actions from previous audit in April 2019, although not all are completed. A section for RCI is included but has not been completed. Only a minor non-compliance is recorded with multiple observations, which seems appropriate. ROCKWOOL: Procedure 4 updated following Audit November 2021. All actions reviewed and closed from April 2019 and November 2021. Audits procedure to be reviewed going forward with creation of new SHE Management Systems Controller position.