

OMA Report – Discharges to Water – EPR

Summary sheet If an operator outsources monitoring to an external laboratory, we would expect that the laboratory holds appropriate accreditation for the analysis concerned.		
Permit Number: BJ9681IX	Compliance Officer: Rhys Ellis	
Operator: Essity	Auditor (if different):	
Discharge point(s):	Others Present: Sian McGregor Andrew	
OMA Sections		SCORE
OMA 1 – Management of monitoring		80%
OMA 2 – Periodic monitoring and test laboratories		87%
OMA 3 – Continuous monitoring		95%
OMA 4 – Quality assurance		80%
	OVERALL SCORE	85.5%
OVERALL SITE ASSESSMENT COMMENTS		Letter
		Variation
		Enforcement
Date of audit: 30/07/19		
Signed: Rhys Ellis		
Date: 10/10/2019		

OMA Report – Discharges to Water – EPR

OMA 1: Management of monitoring		
OMA ELEMENTS	SCORE	COMMENTS
A. Documentation of management system procedures for monitoring	4	The operator had comprehensive and up to date monitoring procedures. Documented procedures are accessible for all relevant staff. Sign off sheet for every procedure. Evidence that this was done.
B. Organisational structure for monitoring	4	There is a management structure covering monitoring issues however there is no specific anagram that focused on monitoring and identifying roles and responsibilities for monitoring tasks. There should be inclusion in the management system of all staff involved in monitoring issues, for example those involved in sampling, calibration and maintenance.
C. Schedules and planning of monitoring, including contingencies	4	Monitoring schedules / plans are produced. There should be a procedure in place for missed samples, and this procedure should cover contingency including samples lost due to equipment failures etc.
D. Monitoring records and use of monitoring data	4	Monitoring results are reviewed and acted upon, but the findings are not fully documented, however moving forward the focus will be on corrective actions which will be recorded on the company wide Gensuite system which will increase the overall score for this section in the long term. It was also summarised by the operator that due to recent improvements particularly on the ETP they will be monitoring trend results more closely in future It was also advised that a procedure is required for PART A and B notification to NRW,
E. Understanding the requirements of the permit and monitoring methods	4	The operator's personnel responsible for implementing monitoring can demonstrate understanding of monitoring requirement and methods. However, there is no defined training matrix or plans evident for individuals.

OMA Report – Discharges to Water – EPR

OMA 1 – SCORE 20/25

SUMMARY COMMENTS FOR OMA 1

1A.

The operator had comprehensive and up to date monitoring procedures. Documented procedures are accessible for all relevant staff.

Sign off sheet for every procedure. Evidence that this was done.

Operator could not show written agreement from lab that they can meet the standards.

Score of 4

1B.

It was advised that there is a management structure for monitoring issues and there was overall company organogram available including a list for ISO14001 of roles but this did not link to monitoring. There is no specific organogram that focused on monitoring and identifying roles and responsibilities for monitoring tasks. Clarification is needed on the link between job titles and specific monitoring responsibilities, for example job titles of staff with responsibility for sampling, calibration and maintenance of permitted monitoring equipment should be listed on the relevant procedures. Responsibility for organising or undertaking monitoring should also be made clear in role descriptions. The group of staff members with monitoring responsibilities is relatively small and all are aware of the relevant procedures.

There are two team leaders on shift at any one time. Shift operatives have awareness, and all trained on sampling procedures.

SCORE 4

1C.

Monitoring schedules / plans are produced to very high standard with links to relevant procedures and standards, this is an example of best practice. External testing takes place every week on a Wednesday. The sampling regime including where the sample needs to be obtained from, the chemical determinants to be tested and frequency tracker can be found in the Environmental Schedule 2019 on the company I Drive.

Team leaders carry out daily tests all of which are standing agenda items on Daily operational meetings DDS (Daily direction setting meetings).

Missed samples are very few and far between, these would normally be down to Christmas periods (factory shut downs), externally lost samples by lab etc.

There should be a procedure in place for missed samples, and this procedure should cover contingency including samples lost due to equipment failures etc. Reasons for any missed samples should be documented for audit trail purposes.

Score 4

1D

Monitoring results are reviewed and acted upon. Monitoring result are recorded on effluent monthly results spreadsheet, uploaded by either team leader or SQE department. The spreadsheet includes limits and colour flags any exceedances. Results and compliance are discussed and reviewed in Daily Direction Setting meetings.

The 'prophecy' system (recently adapted by the operator) has the ability to look at trend analysis, in proceed monitoring and live systems. This is yet to be used in anger.

OMA Report – Discharges to Water – EPR

There are significant improvements in process monitoring particularly following the ETP upgrade (including internal alarms), set points that are constantly being reviewed to optimise process control and effluent quality.

An example was given of where exceedances are discussed and actions. PART A and B notification dated 23rd July 2019 was raised regarding out of consent water with high temperature of 28.48 degrees versus permit limit of 25 degrees. The operator discussed that as a result a meeting was held which had actions allocated to resolve the issue.

The SHE system is currently being used for to record PART A/B notifications but might be moving forwards to use GENSUITE.

Any upgrades are added to shutdown schedules.

Monitoring results are reviewed and acted upon, but the findings are not fully documented, however moving forward the focus will be on corrective actions which will be recorded on the company wide Gensuite system which will increase the overall score for this section in the long term.

It was also summarised by the operator will trend results more closely in future, particularly as ETP upgrades and tweaking is complete

It was also advised that a procedure is required for PART A and B notification to NRW.

Score 4

1E

The operators' personnel responsible for implementing monitoring can demonstrate understanding of monitoring requirement and methods. Monitoring requirements are implemented. Individuals receive refresher training on internal procedures which are signed dated and logged. Monthly topic discussions cover the EPR permit, induction process cover permit briefly. MCERTS awareness training received by the environment team.

Recommendation: Although there is annual appraisal, individual development plans there are no defined training matrix or plans evident for individuals (particularly individuals involved in monitoring)

SCORE 4.

OMA Report – Discharges to Water – EPR

OMA 2: Periodic monitoring and test laboratories

OMA ELEMENTS	SCORE	COMMENTS
A. Sampling provisions <i>Critical Element</i>	5	Sampling provisions appear compliant
B. Certification of equipment	5	Autosampler is MCERTS certified
C. Measurement methods and standards <i>Critical Element</i>	4	The external lab is UKAS accredited for all the techniques. There is no specific audit of staff implementation of monitoring procedures, but procedures are checked against technical standards which are listed within the document and on the frequency schedule It was suggested that there should be procedures in place to ensure that external laboratories use correct methods of analysis as per permit conditions for example a service level agreement listing the technical methods of analysis. Correct determinants are being analysed for.
D. Calibration methods <i>Critical element</i>	4	The equipment in the lab is calibrated regularly. QC charts are not used.
E. Frequency of maintenance and calibration	4	Sampling and analytical equipment are calibrated to a good standard
F. Reliability of equipment (data availability)	5	Methods and /or equipment are reliable. The availability of data is greater than 95%.
G. Breakdown response	4	Spares available to some of the kit on site Shift technicians are around if breakdowns can be resolved The laboratory currently being used (ALS) are in very close proximity to the site and could provide sampling analysis in the event of any failure in internal sampling
H. Traceability	4	Records and material used for calibration are traceable to standards.

OMA Report – Discharges to Water – EPR

OMA 2 – SCORE	35/40	
SUMMARY COMMENTS FOR OMA 2		
2A Samples are taken from a designated point with a tap at the effluent treatment plant. Sample point complies with TGN M18. Bottles provided by contracted lab (with preservatives where necessary) and samples collected on site and transported to lab by Essity staff. Procedures followed included the use of cool boxes with ice packs and temperature of samples carted is being monitored on departure and arrival at lab which are recorded. (EWI 16) External laboratory is local. Action: It was discussed that the operator will devise a procedure that if temperature is out of range then a new sample should be obtained from the sampler. Operator also to add a requirement to record temperature measurements. SCORE 5 2B. Autosampler is MCERTS certified (Certificate number Siria MC060084/00). SCORE 5 2C The external lab is UKAS accredited for all the techniques. The schedule for testing refers to the methods required by the permit. Recommendation: For the total phosphorus operator should check the equivalency of the methods used by the external laboratory against the methods listed in M18. EWI 23 Internal effluent testing references the determination standards for COD and Suspended solids carried out in house. This is complimented by weekly external laboratory analysis. There is no specific audit of staff implementation of monitoring procedures, but procedures are checked against technical standards which are listed within the document and on the frequency schedule. Recommendation- There should be an official auditing schedule for auditing sampling and on-site testing against the procedure to check that staff are fully compliant. It was also suggested that there should be procedures in place to ensure that external labs use correct methods of analysis as per permit conditions for example a service level agreement listing the technical methods of analysis. Correct determinants are being analysed for. SCORE 4 2D calibration methods.		

OMA Report – Discharges to Water – EPR

The equipment in the lab is calibrated regularly. This would include specialist company (PROCAL) for oven, balance, COD Reactor. This is on an annual service contract.

These include the following:

Oven Procal Calibrated 06/03/2019

COD Reactor Calibrated 05- 6/3/19

Photo spectrometer (HACH) Serviced/calibrated 18/12/18 next due December 2019

Balance - 06/03/19

Mas Balances are checked against referenced weights. This is recorded on spreadsheet copy seen on site.

Morning tours to be introduced in future that will include a check for oven temperature at 105 degrees celsius

EWI 11 Instruction covers pH and is recorded on spreadsheet-Copy seen on site

For COD Cuvette - a blank standard is tested every day for COD

Hach Lang service annually for the spectrometer.

SCORE 4

2E

Internal calibrations are tracked using Outlook reminders being incorporated into on a frequency tracker. Internal calibrations are routinely being carried out monthly unless problems are identified.

The frequency of maintenance and calibration is adequate for the type of equipment and methods used.

Calibration stickers evident on equipment

Site services have a frequency list for maintenance for both internal and external calibration

Anything requiring maintenance above monthly is entered on the frequency tracker for each department, which feeds into the daily meeting. The frequency tracker colour flags any overdue events.

For anything requiring preventative maintenance / calibrations less frequent than monthly is entered on SAP.

Control Charts are not used for in house monitoring, however determined in house monitoring are also analysed in external lab every week

SCORE 4.

2F.

Methods and /or equipment are reliable. The availability of data is greater than 95%. On site engineers carry out maintenance and repairs, where possible, and are fully competent.

The site has the contingency to use external laboratory if any in house testing equipment fails.

SCORE 5

2G

Spares available to some of the kit on site

Shift technicians are around if breakdowns can be resolved

The laboratory currently being used (ALS) are in very close proximity to the site and could provide sampling analysis in the event of any failure in internal sampling.

For pH/temperature probe and suspended solids probe there are identical pieces of equipment earlier in the ETP process that site would explore the possibility of swapping out and putting in place.

In relation to other laboratory kit the operator would send samples to ALS until equipment is fixed.

OMA Report – Discharges to Water – EPR

SCORE 4

2H

Records and material used for calibration are traceable to standards.

Laboratory balances were in area free of draught, direct sunlight, heat sources and supported on a flat surface.

Mass balance is calibrated using certified weights. Current certificate for the weight expires on March 2020.

pH meter is calibrated daily against a pH reference standard 4, 7 and 10. Records seen of 3-point check

Preservatives are part of the weekly checklist

Pipettes are certificated when purchased. Currently not checked or audited during use. Action –

This to be added to audit of procedures that covers use of pipettes and added to calibration schedule

Digital Thermometers, these are recently purchased for use on site to monitor the temperature in the cool box which transport samples externally (before samples leave site and after they have received the external laboratory). These are to be included in calibration schedule and results recorded.

SCORE 4

OMA Report – Discharges to Water – EPR

OMA 3: Continuous monitoring		
OMA ELEMENTS	SCORE	COMMENTS
A. Provisions for monitoring and location of CWMs <i>Critical element</i>	5	Sampling provisions appear safe and compliant
B. Certification of CWMs	5	Autosampler is MCERTS certified (Certificate number Siria MC060084/00) Flow monitoring equipment is pre MCERTS however its installation has been MCERTS certificated (20 th April 2016) The turbidity meter, pH and DO meter has MCERTS certificates number Siria MC120214/01
C. Measurement methods and standards <i>Critical element</i>	5	Correct parameters are being measured as specified in permit. Please note Dissolved Oxygen and turbidity probes are used for process control purposes requirements equipment audited annually against MCERTS Relevant methods are compliant
D. Calibration methods <i>Critical element</i>	5	CWM'S are calibrated.
E. Frequency of maintenance and calibration	5	The frequency of maintenance and calibration gives an added degree of confidence for the type of equipment.
F. Reliability of equipment (data availability)	5	Equipment is very reliable and calibrated
G. Breakdown response	3	Currently no call out contract for the continuous monitoring equipment on site (Specifically flow meter). Operator to investigate setting up a contract with an external maintenance provider for call
H. Traceability	5	Equipment calibrated to traceable standard by external contractor.

OMA Report – Discharges to Water – EPR

OMA 3 – SCORE	38/40	
SUMMARY COMMENTS FOR OMA 3		
3A Sampling provisions appear safe and compliant with the requirements of M18. Flow monitoring equipment is pre MCERTS however its installation has been MCERTS certificated (20th April 2016). The flow monitoring point is clearly labelled to ensure its not accidentally changed, moved etc. The autosampler was correctly positioned, no evidence of fouling and flow proportional was on programme 2. SCORE 5 3B Monitoring equipment has MCERTS Certification. Flow monitoring equipment is pre MCERTS however its installation has been MCERTS certificated (20th April 2016) The turbidity meter, pH and DO meter has MCERTS certificates number Siria MC120214/01 DO and turbidity are measured for process control and not as per permit requirements. SCORE 5 3C Correct parameters are being measured as specified in permit. Please note DO and turbidity probes are used for process control purposes requirements Relevant methods are compliant The operator has a formal review process, changing kit/flow meter would instigate major changes procedures Annual Audit schedules covers MCERTS equipment and associated procedures. SCORE 5 3D. CWM'S are calibrated. Flow meter calibrated by ABB and scheduled annually. Equipment Manuals are available for all key equipment with site services. SCORE 5 3E The frequency of maintenance and calibration gives an added degree of confidence for the type of equipment. Signage available to make sure any works should not be done without prior agreement. SAP would flag up overdue calibration and maintenance.		

OMA Report – Discharges to Water – EPR

MCERTS procedure for cleaning and checking of flow meter carried out by site services under supervision of the EQS team. Photographic evidence are kept. Procedure number EWI 22 dated 22 01 18

SCORE 5

3F

Equipment is very reliable and calibrated

New procedures of the morning tours of the ETP will include operating ranges of all critical monitoring equipment for both process control and permit compliance. This is in addition to the telemetry system

Reliability reviewed when purchasing equipment. Probes on the ETP are all the same make, e.g. pH probe on bio tower is same as the spot sample.

Any failures would fall under the maintenance schedule.

SCORE of 5

3G

Currently no documentary evidence of call out contract for the continuous monitoring equipment on site. Operator to investigate setting up a contract with an external maintenance provider for repairs or replacement equipment to be provided within a defined time period.

SCORE 3

3H

Equipment calibrated to traceable standard by external contractor.

SCORE 5

OMA Report – Discharges to Water – EPR

OMA 4: Quality assurance		
OMA ELEMENTS	SCORE	COMMENTS
A. External quality control schemes	4	Essity have ISO 14001 Certification for their EMS. ALS have UKAS accreditation for the analytical techniques used.
B. Internal data quality control	3	The external laboratory is MCERTS accredited.
C. Competence of monitoring personnel	4	Sampling and analysis personnel receive training. Relevant staff receive MCERTS awareness training every 2 years. It was recommended that audits are carried out on the sampling methods being used by staff carrying out sampling and analysis in house. It was recommended that there should be a schedule for training on general monitoring and permit requirements for all staff involved in sampling etc. There should also be a defined training matrix or plans evident for these individuals.
D. Auditing of monitoring	4	There is a programme of audits within the EMS and findings are documented and followed up appropriately. The operator has internal auditors trained by SGS.
E. Audit compliance	5	Audit results are documented and followed up.
F. Reporting	4	The contents of the monitoring report meet permit requirements in all aspects and are to an acceptable reporting standard. Reports are forwarded to natural Resources Wales as specified in the permit. There is currently no procedure in place to report monitoring results
OMA 4 – SCORE	24/30	
SUMMARY COMMENTS FOR OMA 4		
4A		

OMA Report – Discharges to Water – EPR

Essity have ISO 14001 Certification for their EMS. ALS have UKAS accreditation for the analytical techniques used.

Site will be looking into using external UKAS accredited lab to verify samples taken in house. For example, ensuring that the weekly sample sent to ALS is analysed in duplicate via in house methods and the results are routinely compared for quality control purposes. **SCORE 4**

4B

The external laboratory is MCERTS accredited.

AQC charts are not used for in house testing.

Blank analysis is undertaken on COD every day, no equivalent is taken for suspended solids.

Consideration should be given to section 6.6 of M18 regarding internal quality control to obtain a higher score in this section.

SCORE 3

4C

Personnel carrying out the sampling and analysis receive in-house training. There are procedures for those staff to follow, there is a sign off record to demonstrate that these relevant staff have read the documents. It was recommended that audits are carried out on the sampling methods being used by staff carrying out sampling and analysis in house.

Relevant staff receive MCERTS awareness training every 2 years.

It was recommended that there should be a schedule for training on general monitoring and permit requirements for all staff involved in sampling etc. There should also be a defined training matrix or plans evident for these individuals.

SCORE 4

4D

There is a programme of audits within the EMS and findings are documented and followed up appropriately. The operator has internal auditors trained by SGS.

Procedures produced by EQS are audited by other departments. For example, COD and suspended solids sampling procedure was audited against technical standard on the 31/12/2018 and was looked at during the visit.

EP09 – Defines plan for audit frequency etc.

For all part of EMS, generic high-level actions are captured on SHE/Gensuite to provide reminders /flags on non-completed actions.

EQS currently have not audited external lab – this is planned in to be done.

Also include there is currently no auditing to ensure staff follow sampling and analysis procedures.

Score 4

4E

Audit results are documented and followed up. There is an annual audit schedule which flags up missed audits.

Internal audit tracker looked at which currently links with SHE system, with the aim of moving to GENSUITE if appropriate.

Deadlines for actions raised and personnel responsible are recorded. Complete and non-complete actions are documented.

OMA Report – Discharges to Water – EPR

SCORE 5

4F

The contents of the monitoring report meet permit requirements in all aspects and are to an acceptable reporting standard. Reports are forwarded to Natural Resources Wales as specified in the permit. There is currently no procedure in place to cover reporting of monitoring results. A procedure to be devised for reporting. It was discussed that this procedure would cover part A and B notification and cover all other notification requirement of the permit.

SCORE 4