
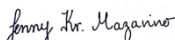



Well Expertise Audit Report

ENVIRONMENTAL VERIFICATION Waste Chain Management

AUDITEE					
Maritime Waste Management AS					
AUDIT NO.					
IA-2019-WM-01					
APPROVAL					
Rev.no	Date:	Auditor:	QA by:	Auditee:	Comments:
1.0	23.08.2019	A. B. Meisler 	J. K. Mazarino  A. E. Lund 	MWM	

Contents

1. Introduction.....	3
1.1 Scope and Objectives	3
1.2 Deviations	3
1.3 Warrant	3
1.4 Participants	3
1.5 Audit Process.....	3
2. Verification results.....	5
2.1 Categories of findings.....	5
2.2 Verification findings	5
2.3 General impression	6
2.4 Conclusion	6
3. References	7
4. Appendices	8
Appendix A Verification notification.....	9
Appendix B Received documentation.....	12

1. Introduction

As part of DNO North Sea (Norge) AS (DNO), PGNiG Upstream Norway AS (PUN) and Well Expertise's (WE) Audit, Review and Verifications plans, an audit was conducted on Maritime Waste Management AS (MWM) 14th August 2019.

1.1 Scope and Objectives

The objective of the audit was to verify that MWM has established and implemented a management system that ensures compliance with relevant legislation, standards, and guidelines. And that auditors' expectations on responsibility, ordering expertise and reporting routines are met.

The scope was to cover systems related to the total waste chain management, from rig and registration in Avfallsdeklarer.no to end treatment. As part of this, MWMs management system was crucial, especially on internal routines and follow-up of subcontractors.

1.2 Deviations

The audit was performed according to plan.

The verification team was made aware of that the operator's responsibility ceases after delivery from MWM to the first waste subcontractor. Due to this the entire waste stream to the end station was not followed up under this verification.

1.3 Warrant

The audit is warranted in WE, DNO and PUN's Audit Plans for 2019.

1.4 Participants

Table 1-1 Participants

Role	Name	Position	Company
Lead Auditor	Anniken B. Meisler	Environmental Manager Environmental Coordinator/Specialist	WE/DNO/PUN
Auditor	Arild E. Lund	Senior HSEQ Lead	DNO
Auditor	Jenny K. Mazarino	Environmental Coordinator	WE/DNO/PUN
Auditee	Tore Hals	Project Manager/ Environmental engineer	MWM
Auditee	Stig Piel	Senior Advisor	MWM
Auditee	Svein Helge Larsen	QHSE Manager	MWM

1.5 Audit Process

A verification notification was sent MWM 24th July (see Appendix A) and relevant documentation was sent WE 5th August (listed in Appendix B). The verification was conducted at MWMs premises as a common interview with key personnel from MWM present with the following time plan:

09.30 - 09.45 Introduction and start-up information

09:45 - 11:00	MWM Management system (systems for handling deviations, regulatory compliance, MoC, suppliers, audits, responsibilities, lessons learned etc.
11:00 - 11:30	Facilitation and follow-up under operation
11:30 - 12:00	Lunch
12:30 - 13:00	Procurement
12:30 - 13:00	Logistics
13:00 - 13:30	Verification team internal summary
13:30 - 14:00	Verification closing meeting

During the interview we jumped a little between the topics, but all themes were covered. The verification team did not find any non-conformances but have two improvement suggestions given in [Chapter 2](#).

2. Verification results

The verification was conducted in an open environment, where the participants from MWM made a positive contribution, appeared honest and willingly shared information.

2.1 Categories of findings

Findings are categorised as:

- Non-conformance (NC)
- Observation (O)
- Improvement Suggestion (IMP)

Non-conformances are classified as:

- Major (MA)
- Significant (S)
- Minor (M)

2.2 Verification findings

Identified non-conformances, observations and improvement suggestions are presented in Table 2-1.

No non-conformances or observations were identified.

Table 2-1 Improvement suggestions

Improvement No.	Description	Ref.	Responsible
IMP 1	Documentation of training. MWM should secure that all training and courses are documented, and that WMW has an overview over timing for needed refresher courses and when certificates expire.	Working environment Act, § 3-2, ref. /1/. Regulations concerning Organisation, Management and Employee Participation Ch.8, ref. /2/.	S. H. Larsen
IMP 2	Learning from incidents. Incidents caused by customers, that affects MWM, have not been reported. To have the full picture/story and back-up/documentation, MWM should report any incident that could affect the company and its reputation. Better to report more than less, to have the needed support.	§ 5, ref. /3/.	Project Manager (all)

2.3 General impression

During the verification MWMs personnel showed that they have control and manage their deliveries and subcontractors in an efficient and robust way through their management system. They have ownership to their processes.

MWM's follow-up of subcontractors is a thorough process where criticality assessments, risk assessments and verifications have been done and are systematically followed up. MWM has started to collect key numbers from all subcontractors and is now developing a system for conformity assessment towards regulations. When this is implemented, WMW will have a robust system for subcontractor follow-up.

The way the Life Saving Rules (LSR) are implemented and adjusted to the way MWM manage their company and deliverables is an example to follow. MWM have established a set of rules, that complement the various Operators LSR, and are made fit for the business they work within.

The verification team has experienced the use of the Management system "Landax" through other verifications and had a negative impression of the system. But MWM used the system as "all inclusive" for follow-up of incidents, non-conformances, deviations, and subcontractors including risk analyses. The system also functions well for lessons learned processes. So Landax is a good tool for managing WMW and their business.

2.4 Conclusion

The improvement suggestions were presented in the closing meeting and accepted by MWM.

The reported improvement proposals should be followed up as soon as possible. All relevant actions and/or mitigating measures shall be identified (including action owner and due date) within **14 days** after receipt of this report.

3. References

Ref. No.	Reference
/1/	Working environment Act, § 3-2
/2/	Regulations concerning Organisation, Management and Employee Participation, Chapter 8
/3/	Internal Control Regulations, § 5

4. Appendices

Appendix No.	Description
A	Verification Notification
B	Received documentation

Appendix A Verification notification

Verification Notification



DATE and TIME : 14. August 2019, at 9.30 am - 14 pm
WHERE : ~~Omag~~ 110 C, 6517 Kristiansund
TO : Maritime Waste Management
ATT. : Stig Piel
E-MAIL : stig@maritimewaste.com
OUR REF. : Waste chain verification
COPY TO : Tore Hals, Jens Petter Aabel, Sveinung Førland, Nils Lilleløgken, Jan Tarek Ø. Nakhleh, Reidar Håland, Ingvild Anfinssen, Marit Brattbakk, Stein Arild Tonning, Einar Framnes, Karen Maria Thaulé-Pedersen, Anne Mork, Morten Laget, Øystein Prytz, Kjetil Vastveit, Jenny K. Mazarino, Stig Seland.
FROM : Anniken B. Meisler
E-MAIL : anniken@wellexpertise.com
MOBILE : +47 476 67 507

NOTIFICATION OF ENVIRONMENTAL VERIFICATION WASTE CHAIN MANAGEMENT – MARITIME WASTE MANAGEMENT

Dear Stig.

As part of Well Expertise AS' (WE) Audit, Review and Verification plan, and preparations for ~~PGNiG~~ Upstream Norway AS (PUN) and DNO North Sea (Norge) AS' (DNO) upcoming operations, a verification activity is planned in order to verify that Maritime Waste Management (MWM) operates in accordance with applicable regulations and operators' requirements on waste treatment.

MWM will be the waste management provider for PUN and DNO under the upcoming operations of their exploration wells Shrek and Canela, and WE wants to do a system verification to look closer at the waste chain management - from rig, via Kristiansund, to final treatment.

Scope

The scope covers systems related to waste chain management, with main focus on hazardous waste and drilling waste (OBM and cuttings).

MWM is asked to present information to cover the topics listed below. The verification team will ask questions and may require checks of records and documentation during or after the presentation.

1. Short company information/presentation (WE, PUN, DNO, MWM)
 2. Introduction to MWM Management system
 - a. Safety statistics
 - b. Non-conformance reporting and follow up
 - c. Incident/accident follow up system (Notification/Emergency Response)
 - d. Lessons learned/experience transfer
 - e. Management of Change
 - f. Environmental procedures and monitoring
 - g. HSE goals for 2019
 - h. Audit plan 2019 and system for following up findings
 - i. Roles and responsibilities
-

Verification Notification



- j. Competence assurance incl. redundancy (competence matrix)
3. Facilitation on rig and follow-up under operation
4. Contracts and procurement system incl. assessment and follow-up of subcontractors
5. Logistics – From rig to Kristiansund, and from Kristiansund to end treatment incl. ADR-transportation of dangerous goods, and inventory management

Timing

14th August 2019 at MWM's offices in Kristiansund. Indicative time plan:

09.30 - 09.45	Introduction and start-up information
09.45 - 11:00	MWM Management system (ref. topic 2 above)
11:00 - 11:30	Facilitation and follow-up (ref. topic 3 above)
11:30 - 12:00	Lunch
12:30 - 13:00	Procurement (ref. topic 4 above)
12:30 - 13:00	Logistics (ref. topic 5 above)
13:00 - 13:30	Verification team internal summary
13:30 - 14:00	Verification closing meeting

Please invite relevant MWM personnel.

A verification of ~~NorSea Vestbase~~ will be conducted 15th August (separate scope), and WE wants MWM to participate when the verification team look at waste management at the base.

Request for information

Prior to the verification, and within 5th August, the verification team would like to receive the following documentation:

- MWM's Permit to receive and treat dangerous waste
- Relevant HSEQ procedures (related to scope)
- List of approved subcontractors
- Verification reports
 - MWM verifications of subcontractors
 - External audits done by 3rd party (most recent)
- Overview of significant environmental aspects
- Objectives /HSE plan for 2019.
- Environmental risk assessment for the external environment
- Responsibility Matrix

The verification team

Anniken B. Meisler	Environmental Manager, Well Expertise	Verification Team Leader
Jenny K. Mazarino	Environmental Advisor, Well Expertise	Assistant
Arild E. Lund	Senior HSEQ Advisor, DNO	Assistant

Verification Notification



Reporting

The verification team will present a summary with observations and/or improvement items in a closing meeting at the end of the verification. The formal report will be issued within two (2) weeks after the verification.

Please confirm by e-mail (environmental@wellexpertise.com) that date and timing for this verification is OK for required MWM personnel.

If need for clarifications related to this notification or the verification activity, please contact the undersigned.

Kind Regards



Anniken B. Meisler

Verification Team Leader

Well Expertise AS

anniken@wellexpertise.com

476 67 507

Appendix B Received documentation

- **Fylkesmannen i Møre og Romsdal, 2017.** *“Tillatelse til mottak og mellomlagring av farlig avfall for Maritime Waste Management AS i Kristiansund kommune»*
- **Kiwa Teknologisk Institutt Sertifisering AS, 2018.** 2018-7943 «Revisjonsrapport»
- **Maritime Waste Management, 2018.** NSGM-275775254-1427 «Program og retningslinjer for vedlikehold – MWM tankanlegg VESTBASE»
- **Maritime Waste Management, 2018.** NSGM-275665254-1452 «Prosedyre og akseptkriterier for teknisk tilstand av utslippskritisk utstyr»
- **Maritime Waste Management, 2017.** «Rapport etter tilsyn, Tilsyn HMSK/DRIFT 2: ENKEL KONTROLL»
- **Maritime Waste Management, 2018.** NSMG-275775254-1334 «Internrapport etter HMS-verifikasjon avfallsleverandører (enkel)»
- **Maritime Waste Management, 2019.** «HMSK-PROGRAM FOR 2019-2020»
- **Maritime Waste Management, 2019.** «Miljøaspekter, kartlegging og analyse – sammendrag (utdrag fra Excel) NORMAL DRIFT
- **Maritime Waste Management, 2019.** «Miljørisikovurdering – rapport»
- **Maritime Waste Management, 2019.** «Miljøaspekter – kartlegging og analyse – sammendrag (utdrag fra Excel) UNORMAL DRIFT
- **MOL Norge AS, 2019.** 3/7-11S OttaVinstra-HSE-RE-005 “Audit of Maritime Waste Management (MWM)
- **NorSea Group, 2019.** «Gjennomgang miljøpåvirkninger og evaluering av vesentlige miljøaspekter»
- **NorSea Group, 2015.** NSGM-275775254-212 «Prosedyre for endringsledelse»
- **Spirit Energy, 2018.** AU 5271 “Waste Management verification”