

APRIL 2023

# EMP PROGRESS REPORT FOR OILTECH NAMIBIA WASTE OIL RECYCLING PLANT AT ARIS INDUSTRIAL AREA



OIL TECH NAMIBIA  
P O BOX 90398,

KLEIN WINDHOEK, NAMIBIA | +264 (0)81 773 91

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**ABBREVIATIONS**

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DEA	Directorate of Environmental Affairs
ECC	Environmental Clearance Certificate
EA	Environmental Assessment
EMP	Environmental Management Plan

# 1. INTRODUCTION AND LOCATION

Oiltech Namibia, based at Aris Industrial Site, Aris (Fig. 1) received Environmental Clearance in April 2017 after the submission of the EMP in March 2017 and again in 2020. This is the fifth follow up report on the progress that has been made since then, as well as, the management of the EMP.



No table of contents entries found.2023



Figure 1. Locality map Aris old Brick Factory 22°45'1.64"S 17°8'8.04"E

## 2. CCTV MONITORING

CCTV cameras for the entire site including the process operation have been installed and are accessible via cellphone and desktop for monitoring and recording purposes. (Fig. 2)



Figure 2. CCTV cameras

## 3. MOTOR VEHICLE TRACKING

Motor Vehicle tracking system by Lifetrack is fully operational in all vehicles.

All vehicles and trucks are monitored for speeding, sharp turns and harsh braking via desktop and cell phones.

## 4. OIL COLLECTION MOBILE APP

Developed by Racvert and owned by Oiltech Namibia.

All oil collections and related services are recorded via a cellphone app developed specifically for oil collections.

Collectors have to upload detail of collections with picture evidence of disposal certificates on a daily basis.

This app allows the Company to manage its recordkeeping electronically, all KPI's and payments to clients for oil collected.



## 5. ENVIRONMENTAL AWARENESS PROGRAM

- Oiltech continued their awareness programme by planting *Portulacaria afra* (known as elephant bush, porkbush, purslane tree and spekboom in Afrikaans) in collaboration with NUST.
- Air emissions are monitored by an independent company from South Africa, Airshed Pollution Control, with annual reports; available on request.
- Internal WhatsApp group created with all personnel included where safety topics are shared on a regular basis
- Personnel attended SHEQ day at Barloworld Namibia and which included a presentation by Oiltech educating on waste oil collections and the process, as well as, services in minimizing hydrocarbon liquids in the environment.



Figure 3 - Barloworld SHEQ day 2023

## 6. CONTINUOUS IMPROVEMENTS SINCE 2020

The following improvements were made enhancing the safety of employees at site:

1. Electrical points have been installed at strategic points to avoid long extension chords lying around which could cause accidents. (Fig. 4)
2. A roof was being erected over the area where oil filters are currently being drained. (Fig. 5)
3. A roof was erected over the electrical switchpoint at the boilers. (Fig. 6)
4. Painting of boiler LFO outlet lines and safety signs. (Fig. 7)
5. Painting of Inspection Pits and safety signs on. (Fig. 8)



**Figure 4. Electrical installation points**





**Figure 5. Erection of steel roof over filter draining**



**Figure 6. Erection of steel roof over electrical point station at boilers**







**Figure 7. Painting of boiler LFO outlet lines and safety signs**



**Figure 8. Inspection Pits painted and safety signs**

**ANNEXURE A – POLLUTION POTENTIAL**  
**AIRSHED POLLUTION REPORT 2022**



**Air Quality Monitoring Report for the Oiltech Namibia Oil  
Recovery Plant: 2022**

Project done on behalf of Oiltech Namibia

**Project Compiled by:**  
G Kornelius

**Project Manager:**  
G Kornelius

**Report No: 22ONL01 | Date: Aug 2022**



**Address:** 480 Smuts Drive, Halfway Gardens | **Postal:** P O Box 5260, Halfway House, 1685  
**Tel:** +27 (0)11 805 1940 | **Fax:** +27 (0)11 805 7010  
**www.airshed.co.za**

## 4 SAMPLING RESULTS

In Table 2 below, sampling results are given for all identified compounds sampled at the four sampling locations as shown in Figure 2. Blank values in the last three columns indicate that an ESL for that compound is not available. As the vapour emissions from heat treatment are now re-routed to serve as part of the combustion air for the heater, reduced sulphur compounds were not specifically tested for.

Table 2: Measured concentrations and comparative values, all in  $\mu\text{g}/\text{m}^3$

Sample ID	1	2	3	4	Short-term ESL	Long-term ESL	Odour detection limit
Acetone	<1.74	<1.740.52	<1.74	<1.740.52	7 800	4 800	1 100
Pentane	<1.81	<1.81	<1.81	<1.81			
n-Hexane	<1.02	<1.02	<1.02	<1.02	6 200	200	1500
Methylethylketone	<0.51	<0.51	<0.51	<0.51			
Ethyl Acetate	<0.86	<0.86	<0.86	<0.86	3 100	1 440	26
Chloroform	<0.90	<0.90	<0.90	<0.90	100	10	500
1,1,1-Trichloroethane	<0.65	<0.65	<0.65	<0.65			
1,2-Dichloroethane	<0.87	<0.87	<0.87	<0.87			
Isopropyl Acetate	<1.02	<1.02	<1.02	<1.02			
Benzene	<0.84	<0.84	<0.84	<0.84	170	4.5	1 500
Cyclohexane	<0.75	<0.75	<0.75	<0.75	3 400	340	35 600
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0	130	13	29 000
Iso-octane	<0.73	<0.73	<0.73	<0.73	5 600	540	
Heptane	<1.16	<1.16	1.33	<1.16	10 000	2 700	1 700
Trichloroethylene	<0.97	<0.97	<0.97	<0.97			
1,4-Dioxane	<1.97	<1.97	<1.97	<1.97			
Propyl acetate	<1.03	<1.03	<1.03	<1.03			
Methyl Isobutyl Ketone	<1.0	<1.0	<1.0	<1.0			
Toluene	0.83	0.70	9.70	3.68	4 500	1 200	300
Isobutyl Acetate	<1.07	<1.07	<1.07	<1.07			
Tetrachloroethylene	<1.14	<1.14	<1.14	<1.14			
1,2-Dibromoethane	<1.89	<1.89	<1.89	<1.89			
Butyl Acetate	<1.12	<1.12	<1.12	<1.12			
Chlorobenzene	<0.59	<0.59	<0.59	<0.59			
Ethylbenzene	<0.59	<0.59	<0.59	<0.59	26 000	570	26
m+p-Xylene	<0.96	<0.96	<0.96	<0.96	200	180	52
Styrene	<1.1	<1.1	<1.1	<1.1			
o-Xylene	<0.62	<0.62	<0.62	<0.62	200	180	52
Nonane	<1.4	<1.4	<1.4	<1.4			12 000
Cumene	<0.69	<0.69	<0.69	<0.69	650	250	41
Propylbenzene	<1.18	<1.180.87	<1.18	<1.18	2 500	250	
1,3,5-Trimethylbenzene	<1.34	<1.34	<1.34	<1.34	4 400	54	180
1,2,4-Trimethylbenzene	<0.81	<0.81	<0.81	<0.81	4 400	54	180
Decane	<1.56	<1.56	<1.56	<1.56			
1,2-Dichlorobenzene	<2.63	<2.63	<2.63	<2.63			

Air Quality Monitoring Report for the Oiltech Namibia Oil Recovery Plant - 2022

Sample ID	1	2	3	4	Short-term ESL	Long-term ESL	Odour detection limit
Naphthalene	<1.61	<1.61	<1.61	<1.61			
Other Hydrocarbons found to be present: Positive (Pos) or Negative (Neg)							
Aliphatic HC [SQ57]	Neg	Neg	Neg	Neg			
Aromatic HC [SQ91]	Neg	Neg	Neg	Neg			

The values above are the averages over the exposure period. As maximum values over shorter averaging periods are always higher than the averages over longer periods, it can be stated with certainty that total VOC concentrations do not exceed the proposals of Seifert and Molhave (300 µg/m<sup>3</sup>).

Wind direction information for the site could not be sourced. However, wind statistics in Windhoek show that winds from the Northwest, West and Southwest occur 49.3% of the hours per year (World Weather 2021). Accordingly the sample collected at Air Monitor 2, located downwind from and closest to the operations, had the highest concentrations. None of the ESLs or odour thresholds for the individual compounds was exceeded for any sample. Values at the school site (Air Monitor 4) show negligible concentrations.

Sampled benzene concentrations did not exceed the SA standard (5 µg/m<sup>3</sup> annual average) even for the on-site measurements. The inhalation unit risk estimate is reported as a range. The highest carcinogenic risk for benzene exposure was found at Air Monitor 2 which would translate to an increased cancer risk of approximately 7 per 1 000 000 over a lifetime. This would be classified as low.

The laboratory report is included in Appendix A – Analysis results.

## 5 CONCLUSIONS

Ambient concentrations of all the volatile organic compounds that were detected are a small fraction of international screening levels or odour thresholds. No health impacts or odour nuisance should therefore be experienced due to the Oiltech operations.

Ambient concentrations of benzene are less than 20% South African National Ambient Air Quality Standards. Additionally, calculated cancer risks associated with the measured concentrations are classified as low when compared to international unit risk figures.

## 6 RECOMMENDATIONS

Annually repeating the above monitoring should provide assurance that the impact due to Oiltech operations, together with possible other industrial expansion in the area, remains within guidelines and/or standards.



## 7 REFERENCES

AIHA (2013). *Odor Thresholds for Chemicals with Established Health Standards*, 2nd Edition.

California Environmental Protection Agency (2007). *Air Toxics Hot Spots Program Risk Assessment Guidelines. Part I: The Determination of Acute Reference Exposure Levels for Airborne Toxicants*.

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Government Gazette (2009, Dec 24). *National Ambient Air Quality Standards. National Environmental Management: Air Quality Act (39/2004)*, 32816.

Mølhave, L et al. (1993) Human response to different mixtures of Volatile Organic Compounds. Proc. 6th International Conference on Indoor Air Quality and Climate: Indoor Air '93, Helsinki.

Mølhave, L. (1982). "Indoor Air Pollution Due to Organic Gases and Vapours of Solvents in Building Materials." *Environ Int.* 8:117-127.

TCEQ (Texas Commission on Environmental Quality (2022) <https://www.tceq.texas.gov/toxicology/esl>

US EPA. (1999) *Integrated Risk Information System (IRIS)*. National Center for Environmental Assessment, Washington, DC. <http://www.epa.gov/iris>.

WHO (2000) *Air Quality Guidelines for Europe Second Edition*. WHO Regional Publications, European Series, No. 91

World Health Organization Regional Office for Europe, Copenhagen <https://world-weather.info/archive/namibia/windhoek/>

World Weather (2021) <https://world-weather.info/archive/namibia/windhoek/> Accessed 18 August 2021

**ANNEXURE B – ENVIRONMENTAL CLEARANCE CERTIFICATE 2017 AND 2020**



REPUBLIC OF NAMIBIA

**MINISTRY OF ENVIRONMENT AND TOURISM**

Tel: (00 26461) 264 2111  
Fax: (00 26461) 229 938

E-mail: [simon.hangula@met.gov.na](mailto:simon.hangula@met.gov.na)

Enquiries: Mr. Simon Hangula

Cnr Robert Mugabe &  
Dr Kenneth Kaunda Street  
Private Bag 13306  
Windhoek,  
Namibia

24 April 2017

**OFFICE OF THE ENVIRONMENTAL COMMISSIONER**

The Manager  
Oil Tech Namibia CC  
P. O Box 90398  
Klein Windhoek  
Windhoek

Dear Sir/Madam

**SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE EXISTING OIL RECYCLING PLANT AT THE ARIS INDUSTRIAL AREA, KHOMAS REGION**

The Environmental Management Plan submitted is sufficient as this has made an adequate provision of the environmental management for the proposed activities. From this perspective, regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project.

On the basis of the above, this letter serves as an environmental clearance certificate for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with Oil Tech Namibia CC and her consultants.

This environmental clearance is valid for a period of (three) 3 years, from the date of issue unless withdrawn by this office.

Yours sincerely,

  
Teofilus Nghitila  
Office of the  
ENVIRONMENTAL COMMISSIONER



**“Stop the poaching of our rhinos”**

All official correspondence must be addressed to the Permanent Secretary



**REPUBLIC OF NAMIBIA**  
**MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM**  
OFFICE OF THE ENVIRONMENTAL COMMISSIONER

**ENVIRONMENTAL CLEARANCE CERTIFICATE**

**ISSUED**

In accordance with Section 37(2) of the Environmental  
Management Act (Act No. 7 of 2007)

**TO**

**Oil Technology Namibia**  
**PO Box 90398, Klein Windhoek**

**TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY**

**Oil Recycling Plant at the Aris Industrial Site, Khomas Region**



**ENVIRONMENTAL COMMISSIONER**

Issued on the date: **2020-07-01**

Expires on this date: **2023-07-01**

(See conditions printed over leaf)

This certificate is printed without erasures or alterations

Reduce  
Reuse  
Recycle



**ANNEXURE C – CURRICULUM VITAE OF MS R. JORDAAN**

Surname : Jordaan

Christian Names : Rachel Elizabeth

Identity number : 700218 000 14

Date of birth : 18 February 1970

Gender : Female

Nationality : Namibian

Residential and Postal : 51, 11<sup>th</sup> Road P.O. Box 3309  
Address Walvis Bay Walvis Bay

Telephone : +264 81 284 8201 (Cell)

Email : sheq@oiltech.com.na



**Employer** : **Oil Technology Namibia CC**

**Position** : **SHEQ Manager**

**Period Employed** : **1 July 2022 - current**

**Main Job Functions** : **The Company specializes in waste oil recycling and related services throughout Namibia**

Reporting directly to the members, main duties and responsibilities are;

- Management of Risks and ensuring compliance with legal and statutory requirements.
  - Ensure the effective implementation of the Safety, Health, Environmental and Quality Management System (SHEQ-IMS), as described in the SHEQ Manual;
  - Establish, Implement and Review the SHEQ-IMS and mitigate risks to the business in conjunction with Top Management and Senior management teams;
  - Conduct internal audits as per internal audit schedule and consult with external parties during external audits;
  - Maintain the requirements of the standard(s) noted in the Quality Manual;
  - Enforce all company procedures with all managers;
  - Report the effectiveness of the SHEQ-IMS to Top management at planned management review meetings;
  - Ensure compliance with Oil Tech's Quality Management System (QMS) and the maintenance thereof.

## **Qualifications**

- OSH Legal Registering & Compliance Auditing
- Currently training as Internal Auditor ISO 9001:2015 and ISO 14001:2015
- Advanced Supervisor and OSH Representative
- Dangerous Goods Convey
- Basic Fire Fighting

# BRS

**BUSINESS RISK SOLUTIONS**

## CERTIFICATE

THIS CERTIFICATE IS PRESENTED TO:

**Rachel Jordaan**

ID No: 70021800014

WHO DEMONSTRATED OUTSTANDING KNOWLEDGE WITH REGARDS TO:

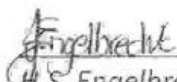
**OSH Legal Registering & Compliance Auditing Programme**

**BRS © 02/09/22/594**

### COURSE CONTENT:

Inserting required data and compiling a report including relevant dashboards for:

1. Document Control Sheet
2. Executive Summary
3. Detailed Summary
4. Clauses, Priority & Corrective Actions
5. Key Management Processes (KMP)
6. Operational Standards / Processes
7. Evidence Required
8. Legal Register
9. Detailed L / S / P Commitment



*H.S. Engelbrecht*

*Managing Director*

*BRS-Business Risk Solutions*



*Certificate No: BRS 1104650*

*Date Issued: 2022-09-16*

*Expiry Date: N.A.*

# BRS

**BUSINESS RISK SOLUTIONS**

## CERTIFICATE

THIS CERTIFICATE IS PRESENTED TO:

# Rachel Jordaan

ID No: 70021800014

WHO DEMONSTRATED GOOD KNOWLEDGE WITH REGARDS TO:

### **Advanced Supervisor and OSH Representative**

Aligned with the National OSH Certificate, Level 4:

1. Demonstrate basic knowledge of workplace health and safety
2. Ensure your own actions reduce risks to health and safety
3. Demonstrate responsibility within workplace to protect the environment
4. Monitor procedures to safely control work operations
5. Supervise the health, safety and welfare of an employee new to a role in the workplace
6. Advocate and keep pace with improvements in health and safety practices
7. Develop and maintain individual and organisational competence in health and safety matters
8. Develop and implement effective communication systems for health safety information
9. Develop procedures to safely control work operations
10. Promote a positive a health and safety culture at the workplace
11. Contribute to health and safety legal actions



  
H.S. Engelbrecht

Managing Director  
BRS-Business Risk Solutions

Certificate No: BRS 1104650

Date Issued: 2023-04-28





# CERTIFICATE

THIS CERTIFY THAT

**R.F Jordan**

**ID: 700218 0001 4**

**Has Successfully completed a course in Convey Dangerous Goods by Road**

**Road Traffic and Transport Act, 22 of 1999 Chapter IV**

**Road Traffic and Transport Regulations 2001**

Registration No CC2021 08872 & Local Authority 2012 /2790 & A.I.A 21/108 Min of Labour

Min Transport 1/5/2/4 TDG Standards 123259 NQF 5 Credits 4

West Fire Standard 115753 NQF -5 Credits 15 Cert No DNL 12/ASM /01566

This Certificate is valid for 1 years

**Date of Issue: 22 April 2023**

**Expiry date: 21 April 2024**

**Cert No WF 2023 155**



**West Fire**  
P O Box 705  
Walvis Bay  
Call 081124 4455  
Mail: [wffire@westfire.com.na](mailto:wffire@westfire.com.na)



**Instructor**

Graduate Diploma 91/3815







Scan the QR code with any QR reader to verify the certificate.

# CERTIFICATE OF REGISTRATION



This is to certify that:

## OIL TECHNOLOGY NAMIBIA CC

P.O. BOX 90398 WINDHOEK  
WINDHOEK, NAMIBIA

*the management system of the above organisation has been assessed and found to comply with the requirements of the management system standards detailed below*

STANDARD

# ISO 14001:2015

## Environmental Management System

### Certification Scope

Selling and Blending of Fuel Oil Manufactured from Collected Used Oils and Relevant Products and the Provision of Other Related Services such as Recycling of Oil Filters, Cleaning of Separator Pits and Land-Based Oil Spill Clean Ups

### Certification Calendar

Certificate Number  
IAS2211144439

Date of Registration  
22 Nov 2022

Client ID  
C11939

Valid From  
22-Nov-2022

Revision No.  
00

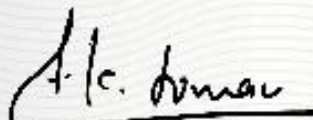
Valid Until  
21-Nov-2023

\*Validity of this certificate is subject to successful and timely completion of the annual surveillance audit

Note<sup>1</sup>: Certification cycle expiry date of this certificate is - 21-Nov-2023.

Note<sup>2</sup>: Surveillance 01 will be due in the month of Oct-2023 and Surveillance 02 will be due in the month of Oct-2024

<sup>1</sup> The certificate is valid in the capacity of SAGACI as a self-declared customer. Back when it has expired, it is not a reason to issue a formal complaint or certificate suspension as per the official website of certification ([www.sagaci.com](http://www.sagaci.com))

  
Authorised Signatory



**SAGACI CERTIFICATIONS PRIVATE LIMITED**

[www.sagaci.com](http://www.sagaci.com)

This certificate has been issued by SAGACI Certifications (Pty) Ltd, 20, 21st Floor, Victoria Avenue, Windhoek, Namibia (P.O. Box 110091), and all her staff are subject to the strictest of control. The certificate is valid for 12 months from the date of registration. The certificate is subject to the requirements of the management system standards detailed below. For more information on the certification process, please visit our website at [www.sagaci.com](http://www.sagaci.com) or contact our customer service team at [info@sagaci.com](mailto:info@sagaci.com) or [Tel: +264 81 246 511](tel:+26481246511). Fax: [+264 81 246 511](tel:+26481246511).

## ANNEXURE E – MME PERMIT



REPUBLIC OF NAMIBIA

### MINISTRY OF MINES AND ENERGY

Tel: +264 61 284-8111  
Fax: +264 61 238643 / 220386  
E-mail: [info@mme.gov.na](mailto:info@mme.gov.na)  
Website: [www.mme.gov.na](http://www.mme.gov.na)

6 Aviation Road  
Private Bag 13297  
WINDHOEK

#### PERMIT

#### FOR USED MINERAL OIL

**PERMIT NO: 01/2023**

Enquiries: I Gaingob  
Reference: 10/3/2

16 January 2023

1. In terms of Section 2(1)a(1) of the Petroleum Products and Energy Act, 1990 (Act 13 of 1990) permission is hereby granted to:

Oil Tech CC Namibia  
P O Box 90398  
Klein Windhoek  
Namibia

To perform the following activities in respect of used mineral oil:

- Collect and store used mineral oil throughout Namibia.
  - Store collected used mineral oil at the premises situated at **Oil Technology CC Namibia at Aris Industrial area.**
  - Transportation of used mineral oil and refined products throughout Namibia.
  - Collection, and processing of used filters at Aris Industrial area.
2. This Permit is valid for a used mineral oil volume of up to **7 000 000 liters per annum.**
  3. This Permit is issued subject to the conditions as laid down in Regulations No. 112 of 1991 dated 11 October 1991 relating to the purchase, sale, supply, acquisition, usage, possession, disposal, storage, transportation, recovery, and re-refinement of used mineral oil as issued in terms of Section 2(1) of the Act and is **only valid until 12 January 2024.**

All official correspondence must be addressed to the Executive Director

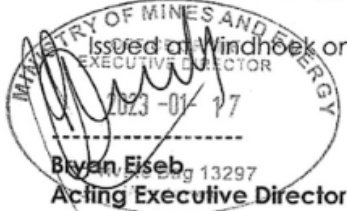
- 
4. This Permit is issued subject to the following further conditions:
- 4.1 All Municipal and other Health Regulations to be adhered to.
  - 4.2 All Transport Regulations to be followed regarding proper tankage, as laid down by the Ministry of Works and Transport.
  - 4.3 All fire hazard and/or security measures to be taken in conformity with the SABS Specification 086 and 089.
5. Statistics will have to be provided before or on 28 February on an annual basis, to the:

Executive Directory  
Ministry of Mines and Energy  
Private Bag 13297  
Windhoek  
Namibia

**Attention: Mr. I Nghishoongele**

Re-application for this permit must occur **30 days prior to the expiry date.**

Issued at Windhoek on 12 January 2023.



- Cc. (1) Mr. Harold Schmidt  
PROMEX CC  
Secretary to Oil Industry  
P.O. Box 11335 Klein Windhoek,  
Windhoek
- (2) Executive Director  
Ministry of Works and Transport  
Private Bag 13341  
Windhoek
- (3) Municipality of Walvis Bay  
Health Department  
Private Bag 5017  
Walvis Bay
-