

HSE NEWS WORKING FOR YOU TO KEEP YOU SAFE

Latest HSE Statistics YTD

	2015	2016
Workplace fatalities	0	0
Non-work related fatalities	0	0
Non-accidental deaths (NADs)	0	0
Lost Time Injuries (LTIs)	0	0
All injuries (excluding first aid cases)	0	0
Motor Vehicle Incidents (MVIs)	0	0
Roll over - MVIs	0	0
Serious MVIs	0	0
Lost Time Injury Frequency (LTIF)	0	0
Life Saving Rules Violations		

YTD

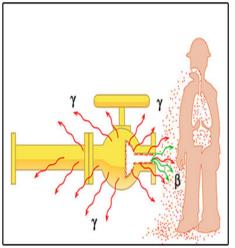
Journey management	0
Speeding/GSM	0
Seatbelts	0
Overriding safety device	0
Working at heights	0
Permit	0
Confined space	0
Lock out tag out	0
Drugs and alcohol	0
Gas testing	0
Smoking	0
Suspended Load	0
Vehicle Class A/B Defect	
YTD	

Class A	0
Class B	0

HSE TIP

The consequences of failing to comply with safe NORM procedures may place you or others at risk. For any further support, contact the MCOH team.

Important News



NORM stands for Naturally **O**ccurring **R**adioactive **M**aterials. NORM is all around us as background radiation, all of the time. It is part of the earth's crust and found in very low concentrations in rocks, soil and water. Background radiation emitted from NORM is small and mainly harmless; however, processes such as oil and gas production can cause NORM or TENORM (Technologically Enhanced Naturally Occurring Radioactive Materials) to build up to levels, that may be harmful to workers' health or the environment.

What You Need to Know

NORM Risk Exposure:	Monitoring:	Disposal of Equipments:
The major health risk is	Always use calibrated	All NORM-contaminated
from the inhalation or	NORM detectors. Any	equipment shall be
ingestion of scales or	measurement in which the	transported to the Bahja
debris contaminated with	dose rate exceeds 0.5	NORM yard for proper
NORM, particularly during	μSv/hr is considered	management and
pipe cutting, removing	NORM-contaminated.	decontamination.
solids from oil tanks and		
pits and refurbishing gas	1	:
processing equipment. The		
risk is almost negligible	1	:
when NORM scales are		
inside the tubular and the	1	1
tubular remain down hole.		

RESTRICTED Age-15	Decement D: SP-1178 Out 2014	
	Development Oman L.L.C.	
Natural Occu	Specification	
Document ID	sP-1170	
Document Type	Specification	
Security	Restricted	
Discipline	Prist	
Document Owner	CFDH-Occupational Health	
Month and Year of Issue	October 2054	
Version	5.0	
Keywords	NORM, Contamination, Monitoring, Exposure limits	
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Oil and gas producing companies are unwillingly co-producingNORM with their day-to-day activities giving rise to NORM-contaminated waste. These materials decay, emitting gamma photons and alpha and beta radiation particles which are potentially harmful to health if inhaled or ingested. NORM not only present a potential health risk to staff maintaining and servicing production equipment or handling waste streams, but may also result in environmental issues.



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HSE Advice Note

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NORM flows with oil, gas and water mixture and accumulates as scale, sludge and scrapings on the interior surfaces of processing equipments and vessels. To determine whether or not a facility has NORM contamination, a NORM survey and sampling need to be conducted and the database shall be updated. Before starting work, supervisors must look at previous NORM survey results, refer to NORM maps or look for labels on contaminated equipments. As a rule in PDO, any equipment which has been conveying or storing production fluids shall be treated as NORM- contaminated until proven otherwise. The specification SP1170 describes PDO's minimum requirements for managing NORM. Additional guidelines for specific maintenance and service activities such as tank cleaning, sampling, and well workovers etc are also available and linked to the specification. Health effects

due to exposure to NORM above exposure limits following inadequate safety precautions are typically delayed and may take many years before the development of certain forms of cancer. It is important to understand that the potential health effects are strongly dose-related, and while medical surveillance is a standard strategy that is often used, it is, however, difficult to find medical tests that detect meaningful abnormal changes in a timely fashion. Therefore it must be emphasised that source control, exposure monitoring, worker education, safe work practices such as permit to work, refraining from eating, drinking and smoking in workplaces and wearing the correct PPE are the most important strategies for preventing exposures. NORM training is available for all personnel handling or supervising NORM activities. NORM-contaminated equipments must be handled,

maintained, transported, stored, and disposed in a controlled manner to protect the worker and the environment. contaminated equipment shall be sent for decontamination prior to any maintenance and all NORMcontamina-ted waste generated during maintenance should be drummed or put into labelled containers. Representative samples should be collected from the waste and analysed for radioactivity. Obsolete NORMcontaminated pipes and equipments should be clearly labelled as "NORM Contaminated Materials" and removed to a designated area, restricted for the general public. The NORM yard in Bahja is PDO's licensed NORM waste facility. All contaminated equipments and sludge exceeding the PDO limit must be properly sealed, labelled and transported to the NORM waste yard in exclusive use vehicles and stored for decontamination or long-term disposal.

