



TAQA

Inspecteur - generaal der Mijnen
De heer drs. H.A.J.M van der Meijden
Postbus 24037
2490 AA Den Haag

Staatstoezicht op de Mijnen			
Nr.			
14 JAN 2016			
GL: Wabo			
Omg	02	Drl	

Den Haag, 12 januari 2016

Onderwerp: Hoeveelheid en kwaliteit geïnjecteerd productiewater locatie Zuid-Schermer
Omgevingsvergunning ETM/EM/11124662
Omgevingsvergunning DGETM-EM/14123996

Ons kenmerk: TEN_DM#152331-v2

Geachte heer Van der Meijden,

Via de locatie Zuid-Schermer worden de waterinjectieputten Zuid-Schermer-1 (ZSM-1) en Starnmeer-2 (STM-2) bereikt. Vanaf de locatie kan productiewater, dat van nature met het binnen de Bergen Winningsvergunning gewonnen gas wordt mee geproduceerd, na afscheiding van het aardgas, in de beide genoemde reservoirs geïnjecteerd worden. Tevens wordt op de locatie het productiewater geïnjecteerd dat vrij komt bij het terugwinnen van aardgas uit de gasopslag Almaar (PGI) en de gasopslag Bergermeer.

De injectie vindt plaats op een diepte van circa 2100 meter onder het maaiveld. Het te injecteren productiewater wordt periodiek bemonsterd en continue qua hoeveelheid geregistreerd.

Ingevolge voorschrift I-IV-1 van bovengenoemde omgevingsvergunningen bericht ik u als volgt zoals ik tevens met gelijke post het College van B&W van de gemeente Alkmaar (voorheen Schermer) heb geïnformeerd.

In de afgelopen injectieperiode 31 oktober 2014 - 31 oktober 2015 is in totaal 3318 m3 productiewater geïnjecteerd met een maximaal dag debiet van 159 m3 op de datum 22 april 2015.

In totaal is 2098 m3 van het geïnjecteerde productiewater afkomstig uit de Bergen Winningsvergunning en 1220 m3 afkomstig van gasopslag Alkmaar.

In de verslagperiode is 0 m3 productiewater geïnjecteerd in de put ZSM-1 en 3318 m3 productiewater geïnjecteerd in de put STM-2.

Tot de laatste ijk datum 11 december 2015 is in totaal 14.579 m3 productiewater geïnjecteerd in de put STM-2.

Tot de laatste ijk datum 11 december 2015 is in totaal 0 m3 productiewater geïnjecteerd in de put ZSM-1.

De injectiedruk van STM-2 is in genoemd tijdvak niet boven de 6.5 bar gekomen.

De kwaliteit wordt periodiek bemonsterd, een recent analyserapport treft u aan in bijlage 1.

Er hebben zich geen niet-routinematige activiteiten in de verslagperiode voorgedaan.

Ik vertrouw er op u hiermee voldoende te hebben geïnformeerd,

Met vriendelijke groet,
TAQA Energy BV

JATJ Huijsmans
Manager Permitting & Civil

Bijlage 1: analyse rapport productiewater Shoretank 804, 12-11-2015

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SGS Oil, Gas & Chemicals
5/A Nieuw-Zeelandweg
1045 AL
Amsterdam
Netherlands

To: TAQA ENERGY B.V.
Postbus 11550
Den Haag 2502 AN
NL

tel - +31 (0) 20 4073200
fax - +31 (0) 20 6118963
email - nl.ogc.amsterdam@sgs.com

Attn: Mr. Peter Stam
Client Ref.: **G101400**
Date: 26 november 2015

Inspection Report

Report No: 683850.1
Date: 25-11-15
Location: Amsterdam
Product: Water
Vessel: Shoretank 804

Documents Enclosed

Time Log
Analytical Reports
Sample Report

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Attachments N/A

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Distribution

TAQA ENERGY B.V.

Attn: Mr. Peter Stam

SGS Nederland B.V.

5/A Nieuw-Zeelandweg, 1045 AL, Amsterdam, Netherlands tel - +31 (0) 20 4073200 fax - +31 (0) 20 6118963
Head Office: Malledijk 18, Puntweg 2, PO Box 200, 3200 AE Spijkenisse, Netherlands, www.sgs.com
Member of SGS Group (SGS SA)



Report No: 683850.1
Date: 25-11-15
Location: Amsterdam
Product: Water
Vessel: Shoretank 804

Time Log

	<u>Time</u>	<u>Date</u>
Inspector left office Amsterdam	10:00	12-11-15
Inspector arrived at Taqa, Alkmaar	10:40	12-11-15
Commenced sampling shoretank 804	11:10	12-11-15
Completed sampling Shoretank 804	11:25	12-11-15
Inspector left Taqa, Alkmaar	11:45	12-11-15
Inspector returned at office Amsterdam	12:24	12-11-15

Delays

<u>From:</u>	<u>Time</u>	<u>Date</u>	<u>To:</u>	<u>Time</u>	<u>Date</u>
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Remarks

Travelcosts: Amsterdam - Alkmaar - Amsterdam: 88,2 km.

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Report No: 683850.1
 Date: 18-11-15
 Location: Amsterdam
 Product: Water
 Vessel: Shoretank 804

Analytical Report

Sample ID Text/No. GP-15-47901.001
 Sample Source: Shoretank 804

12-11-15

Analytical Test	Test Method	Reporting Limit	Result	Units
Kwik	ISO 12846	0,10	95	µg/l
Metalen	NEN 696/NEN6966/C1			µg/l
Arseen		10	< 10	µg/l
Cadmium		1,0	4,5	µg/l
Chroom		5,0	77	µg/l
Koper		10	91	µg/l
Lood		10	1000	µg/l
Nikkel		10	32	µg/l
Zink		20	930	µg/l
Minerale Olie Totaal	Nen-EN-ISO 9377-2			µg/l
Fractie C-10-C12		25	40000	µg/l
Fractie C-12-C22		25	42000	µg/l
Fractie C-22-C-30		25	900	µg/l
Fractie C-30-C-40		25	530	µg/l
Fractie C-10-C-40		100	83000	µg/l
Vluchtige verbindingen	NEN-EN-ISO 15680			µg/l
Benzeen		0,20	37000	µg/l
Ethylbenzeen		0,20	2700	µg/l
Tolueen		0,20	12000	µg/l
m-+p-Xylenen		0,20	1700	µg/l
o-Xyleen		0,10	1400	µg/l
-Som Xylenen		-	3100	µg/l
-Som BTEX		-	54000	µg/l
Naftaleen		0,050	19	µg/l
EOX	NEN 6402			µg/l
EOX as Cl		1,0	3,7	µg/l
PAK's	SGS12-01			µg/l
Naftaleen		0,010	12	µg/l
Acenaftyleen		0,010	2,5	µg/l
Acenafteen		0,010	0,88	µg/l
Fluoreen		0,010	1,9	µg/l
Fenantreen		0,010	3,4	µg/l

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For evaluation of the results, the method's precision statement applies. Also please refer to ISO 4259 Determination and application of precision data in relation to methods of test or ASTM 3244 Standard practice for utilization of test data to determine conformance with specifications (latest editions of each).

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Report No: 683850.1
 Date: 25-11-15
 Location: Amsterdam
 Product: Water
 Vessel: Shoretank 804

Analytical Report

Sample ID Text/No. GP-15-47901.001
 Sample Source: Continue

Date Logged: 12-11-15

Analytical Test	Test Method	Reporting Limit	Result	Units
Antraceen		0,010	< 0,50	µg/l
Fluoranteen		0,010	< 0,50	µg/l
Pyreen		0,010	< 0,50	µg/l
Benzo(a)antraceen		0,010	< 0,50	µg/l
Chryseen		0,010	< 0,50	µg/l
Benzo(b)fluoranteen		0,010	< 0,50	µg/l
Benzo(k)fluoranteen		0,010	< 0,50	µg/l
Benzo(s)pyreen		0,010	< 0,50	µg/l
Dibenzo(ah)antraceen		0,010	< 0,50	µg/l
Benzo(ghi)pyreen		0,010	< 0,50	µg/l
PAK's tot. 16		-	< 27	µg/l
Anionen	ISO 15923-1			mg/l
Chloride als Cl		1,5	170000	
Sulfaat als SO4		1,7	340	
CZV	NENISO 15705			mg/l
CZV		10	390	
Kjeldahl stikstof	NEN 6646			mg/l
Kjedahl stikstof als N		0,250	66	
Onopgeloste bestanddelen	NEN 6621			mg/l
Onopgeloste bestanddelen		5,0	8,7	
pH	ISO 10523			
pH		2,0	5,9	
Temperatuur pH-meting		-	20,4	°C

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Report No: 683850.1
Date: 25-11-15
Location: Amsterdam
Product: Water
Vessel: Shoretank 804

Sample Report

<u>Sample Source</u>	<u>Date</u>	<u>Time</u>	<u>Quantity</u>	<u>Volume</u>	<u>Seal No.</u>	<u>Distribution</u>
Shoretank 804	12-11-15	11:25	5	1 Ltr.		Analysis

Total: 5

Retained samples will be held for 90 days, unless other instructions are received, after which they will be disposed of in accordance with current legal requirements.

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