

Environment & Social Monitoring Report (November 2017 to April 2018)

Environmental and Social Performance Report
April 2018

AZE: Shah Deniz Gas Field Expansion Project

Prepared by Sustainability

The Environmental and Social Performance Report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "Terms of Use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.



SUSTAINABILITY

FUTURE GROWTH

Client: Southern Gas Corridor CJSC

Independent Environmental and Social Consultant's Monitoring Report for the Shah Deniz II – Gas Field Expansion Project

November 2017 – April 2018



Photograph 1: Monitoring Team at Sangachal Terminal (B. Gomez, ADB).



Photograph 2: SD2 Flare (C. Grant, Sustainability Pty Ltd)

Report Details

Report prepared for: Southern Gas Corridor CJSC (the Borrower)

Report prepared by: Sustainability Pty Ltd
Suite 3, 118 Flora Terrace
North Beach, Western Australia, 6020
www.sustainability.net.au
+61 (0)8 9246 6666

Team: John Miragliotta Project Director – Principal Reviewer
Catherine Grant Social Specialist

Document Control

Revision	Author	Reviewer	Approver	Date
A	CG	JM	JM	30/05/18
0	CG	JM	JM	01/06/18
1	CG	JM	JM	04/07/18
Rev No.	INITIALS	INITIALS	INITIALS	Click to enter a date.
Rev No.	INITIALS	INITIALS	INITIALS	Click to enter a date.

Acronyms and Abbreviations

ADB	Asian Development Bank
ATA	Amec-Tekfen-Azfen
bcma	billion cubic meters per annum
BDJF	Baku Deepwater Jacket Factory
BOP	Blow Out Preventer
BTC	Baku-Tbilisi-Ceyhan
CHSS	Community, Health, Safety, and Security
EBRD	European Bank for Reconstruction and Development
ECAs	Export Credit Agencies
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EITC	Extractive Industries Transparency Commission
EIW	Early Infrastructure Works
EMP	Environmental Management Plan
EPs	Equator Principles
EPS	Environmental Protection Standards
ES	Environmental and Social
ESAP	Environmental and Social Action Plan
ESHS	Environmental, Social, and Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
FFD	Full Field Development
FGR	Flare Gas Recovery
FID	Final Investment Decision
FLMP	Fishing Livelihoods Management Plan
GHG	Greenhouse Gas
GIIP	Good International Industry Practice
H&S	Health and Safety
HR	Human Resource
HSES	Health, Safety, Environmental and Social
HSE	Health, Safety and Environmental
HWTF	Hazardous Waste Treatment Facility
ICA	Intercreditor Agency
IFC	International Finance Corporation
JV	Joint Venture
KPI	Key Performance Indicator
LARP	Land Acquisition and Resettlement Procedures
IESC	Lenders Independent Environmental and Social Consultant
LOMS	Local Operating Management System
MEG	monoethylene glycol
MMP	Management and Monitoring Plan
MODU	Mobile Offshore Drilling Unit
MOP	Mutual Operations Plan
MP	Management Plan
MSDS	Material Safety Data Sheet
NGO	Non-Governmental Organisation
NO2	Nitrogen Dioxide
OHS	Occupational, Health and Safety
OMS	Operating Management System
PIC	Project Information Centre

PPE	Personal Protective Equipment
PSA	Production Sharing Agreement
PS	Performance Standard
PR	Performance Requirement
PTW	Permit to Work
RA	Risk Assessment
RAP	Resettlement Action Plan
SCP	Southern Caucasus Pipeline
SCPx	SCP Expansion
SD	Shah Deniz
SD2	Shah Deniz Stage 2
SDB	SD Bravo
SDB-PR	SDB Production and Risers
SDB-QU	SDB Quarters and Utilities
SEP	Stakeholder Engagement Plan
SGC	Southern Gas Corridor CJSC
SMP	Social Management Plan
SOCAR	State Oil Company of the Azerbaijan Republic
SOP	Standard Operating Procedure
SPS	Safeguard Policy Statement
ST	Sangachal Terminal
Sustainability	Sustainability Pty Ltd
TAP	Trans Adriatic Pipeline
TANAP	Trans Anatolian Pipeline
TKAZ	Tekfen Azfen Alliance (construction contractor)
TSP	Total Suspended Particle

CONTENTS

Executive Summary

EXECUTIVE SUMMARY	I
Introduction	i
Summary of Key Findings	i

Report

1. PROJECT SUMMARY	1
2. INTRODUCTION	2
2.1 Background	2
2.2 Project Description	2
2.3 Construction Status.....	4
2.4 SD2 Project Planned Activities and Milestones for 2018	4
2.5 Applicable Project Standards	4
2.6 Sources of Information	5
2.7 Monitoring Site Visit Attendance	6
2.8 Report Organisation	6
2.9 Scope of this Review	6
3. FINDINGS	8
3.1 Description of Non-Conformances	8
3.2 Summary Findings Table	9
3.3 Summary of Incidents of Violations and Non-Compliance	12
3.4 Summary of Incidents of Environmental, Health Concerns and Safety Accidents ..	12
4. ENVIRONMENTAL AND SOCIAL MANAGEMENT CAPACITY	16
4.1 Environmental and Social Management System	16
4.2 Management Programs	19
4.3 Organisational Capacity and Competence	19
4.4 Emergency Preparedness and Response	20
4.5 Stakeholder Engagement.....	21
4.6 Grievance Mechanism	26
5. ENVIRONMENT	29
5.1 Pollution Prevention and Resource Efficiency	29
5.2 Biodiversity Conservation and Ecological Management	33
6. SOCIAL	35
6.1 Labour Working Conditions	35
6.2 Land Acquisition, Resettlement, and Livelihoods Restoration	38

7.	HEALTH AND SAFETY	41
7.1	Worker Health and Safety	41
7.2	Community Health, Safety, and Security	43
8.	CULTURAL HERITAGE	45
8.1	Protection of Cultural Heritage.....	45

Tables

Table 1 Summary of November 2017 - April 2018 Monitoring Findings for the SD2 Project ii
Table 2 SD2 Community Grievance Summary and BP/Contractor Response	27
Table 3 Reportable Spills Summary	29
Table 4 Manpower Status (April 2018)	36
Table 5 Labour Management Forum Grievances and BP/Contractor Responses	37
Table 6 Drilling HSE Performance.....	42

Appendices

Appendix A Document List

Executive Summary

Introduction

Sustainability Pty Ltd (Sustainability) was appointed as the Lenders' Independent Environmental and Social Consultant (IESC) for the Southern Gas Corridor Closed Joint Stock Company's (SGC) (SGC) investment in the Shah Deniz 2 (SD2) Project. This report details the IESC's findings for the monitoring exercise for the period November 2017 – April 2018. It presents the IESC's understanding and assessment of the Project's compliance against Lender standards and provides the status of the Project's environmental and social performance based on information provided by the Project Operator.

Summary of Key Findings

The following table provides a summary of the key monitoring findings for this monitoring exercise for the period November 2017 – April 2018.¹ The table shows any newly open items, the status of issues identified in previous environmental and social monitoring, as well as any closed recommendations related to previous findings. Items in the table are identified by number of the audit (X.Y), where Y is the related action item number. The text descriptor may be updated in subsequent monitoring exercises to reflect current conditions; however, the item number will remain as this reflects the same broad issue and its evolution to closure. The relevant project standards and/or reference to the applicable Lender Environmental and Social Standards to which the issue refers are also included.

All issues are categorised as either High, Medium, Low, or Observations, reflecting the level of non-conformance in terms of the magnitude and/or on time frame in which an impending risk might occur (short-term, medium-term, long-term). Descriptions of the categories are as follows²:

- **High:** Level III critical non-conformance;
- **Medium:** Level II non-conformance;
- **Low:** Level I non-conformance;
- **Observation**
- **Closed**

In summary, the IESC notes:

- There remain no high or medium level non-compliances.
- 2 observations were able to be closed in this monitoring exercise;
- 3 observations remain open at this monitoring exercise.
- No new non-conformances or observation findings were added during this monitoring exercise for the period November 2017 – April 2018. Open observation findings were modified based on consultation with communities.
- The SD2 Project has continued to operate at a high standard, in compliance with Lender requirements during this monitoring period.

¹ This table is provided in further detail in Section 3.2.

² See Section 3.1 for detailed definitions of non-conformance.

Table 1 Summary of November 2017 - April 2018 Monitoring Findings for the SD2 Project

Visit / Issue #	Monitoring Exercise	Closing Date	Description	Non-conformance	Ref	Status	Comments / Report Reference
Stakeholder Engagement and Grievance Management							
1.2	Sep 15 May 16 Apr 17 Oct 17 Apr 18	Apr 18	Consultation with affected communities, including communities in the areas of the associated facilities, and key stakeholder groups.	Observation	IFC PS1 SEP ADB SPS ADB Public Communications Policy	Closed	The IESC was able to verify that community consultation is effective through a meeting held with community representatives on 19 April 2018. Communities verified having generally good access to the Operator and its contractors and that regular community consultation and communication is conducted. It can further be confirmed that communities have access to timely, relevant, understandable, and accessible information, that is presented in a culturally appropriate manner, free of manipulation, interference, coercion and intimidation.
1.3	Sep 15 May 16 Apr 17 Oct 17 Apr 18		Communications with external stakeholders, including the methods for screening, tracking and the resulting response in the management system.	Observation	IFC PS1 SEP ADB SPS ADB Public Communications Policy	Open	Evidence of the procedure for external communications, including the methods for screening, tracking and the resulting response in the management system. While the IESC was able to conduct verification with community representatives in April 2018, this item remains Open, as the IESC is unable to verify Operator incorporation of feedback / grievances in management planning and operations, etc.
1.4	Sep 15 May 16 Apr 17 Oct 17 Apr 18		IESC unable to verify that the grievance mechanism is operational and effective for affected communities.	Observation	IFC PS1 SEP ADB SPS	Open	Project summary data has been provided on grievances however the IESC has been unable to verify this issue adequately. This includes whether issues that have been raised are being further

					ADB Public Communications Policy		considered and incorporated in planning and operations, whether grievances are being managed/resolved within the timeframes provided in the grievance mechanism, to the acknowledgement / satisfaction of both parties, and whether grievance summary feedback is being effectively reported to affected communities. This item remains outstanding as at the second monitoring visit (April 2018).
2.10	Apr 17 Oct 17 Apr 18	Apr 18	IESC verification required of independence of newly established EITC process, including reporting criteria, and ability of civil society to participate in the resource governance space (and by association, open and free engagement with the Operator).	Observation	IFC PS1 ADB SPS ADB Public Communications Policy	Closed	Azerbaijan has recently withdrawn from the Extractive Industries Transparency Initiative (EITI) and established its own initiative, the Extractive Industries Transparency Commission (EITC). IESC is concerned about the potential lack of independent, global oversight of the newly established EITC process, and the ability for the EITC to choose its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI. The IESC is reassured by the Operator's April 2018 update, including independent international oversight of the EITC, and inclusion of civil society actors in EITC processes. This item is now closed (April 2018)
Community Health, Safety, and Security							
1.7	Sep 15 Apr 17 Oct 17 Apr 18		No monitoring or management plan in place to determine or respond to potential impacts to communities in the Project area due to population influx.	Observation	IFC PS4 IFC EHS 23 ADB's policy on Incorporation of Social Dimensions into ADB Operations	Open	Influx was scoped out at the ESIA Phase due to a closed camp, however with demobilisation ongoing of the construction workforce and fewer forward employment opportunities available in the current Azeri market, the mechanism for tracking potential impacts of the

							<p>demanded workforce on communities (e.g. influx, antisocial behaviour) remains unclear.</p> <p>IESC was able to discuss this with communities during a community meeting during the April 2018 Site Visit. It was noted that local employment figures are questioned by community members, who claim that many “local” employees on the Project are not actually from local villages. In the current phase of demobilisation on the Project and fewer employment opportunities, this issue may be exacerbated at the local level should non-locals or perceived non-locals be provided with employment opportunities. The IESC will seek additional verification at the next monitoring opportunity as to the protocols employed by the Operator and its contractors to assess and establish employment applicants’ “local” status.</p>
--	--	--	--	--	--	--	---

1. PROJECT SUMMARY

PROJECT NAME	Shah Deniz Stage 2 (SD2)
PROJECT LOCATION	Sangachal, Azerbaijan
NATURE OF PROJECT	<p>Southern Gas Corridor CJSC investment into BP SD2 Project. The Project comprises upstream gas Stage 2 operations, including:</p> <ul style="list-style-type: none"> • Two new bridge-linked offshore platforms; • 26 gas producing wells; • 500km of subsea pipelines; • Upgrades to the offshore construction facilities; • Expansion of the Sangachal Terminal (ST).
PROJECT CAPACITY	16 billion cubic meters per year (bcma) of gas production
PROJECT KEY DATES	<p>Construction: 2014 - 2018 Target First Gas: 2018</p>
REPORT PREPARED FOR	<p>Southern Gas Corridor CJSC 121 Heydar Aliyev ave., SOCAR Tower, 4th floor, Baku, AZ1029, Azerbaijan Phone: (+99412) 521 30 91 Fax: (+99412) 521 18 75</p>
REPORT PREPARED BY	<p>Sustainability Pty Ltd Suite 3, 118 Flora Terrace, North Beach, Western Australia 6020 www.sustainability.net.au +61 8 9246 6666</p>
TEAM MEMBERS	<p>John Miragliotta: Project Director – Principal Reviewer Catherine Grant: Social Specialist</p>
REPORTING PERIOD	November 2017 – April 2018 (6 months)
REPORT NUMBER	SGC001a_IESC SD2 Monitoring Report – Site-Based_Rev0

2. INTRODUCTION

2.1 Background

Sustainability Pty Ltd (Sustainability) was appointed as the Lenders' Independent Environmental and Social Consultant (IESC) for the Lender group financing the Southern Gas Corridor Closed Joint Stock Company's (SGC) investment interest in the Shah Deniz 2 (SD2) Project.

The Shah Deniz (SD) gas field lies approximately 100km south east of Baku, within the Azerbaijani sector of the Caspian Sea. Development of the oil field is being pursued in stages under the terms of a Product Sharing Agreement (PSA) between the state Oil Company of the Azerbaijan Republic (SOCAR) and a consortium of companies. SGC was established to consolidate, manage and finance the Republic of Azerbaijan's interests in the full-field development of the "Shah Deniz" gas-condensate field, in addition to the expansion of the South Caucasus Pipeline, construction of the Trans Anatolian (TANAP) and Trans Adriatic (TAP) Pipelines.

The SD Stage 1 (SD1) operations commenced in 2006, while this environmental and social monitoring relates to the second stage of development of the Shah Deniz field, SD2. Lender involvement and financing of the SD2 development requires both pre-finance due diligence and post-finance project construction and operation assurance related to the various environmental, health, safety, and social performance standards relevant to the Project. After the Environmental and Social (E&S) due diligence was completed in August 2016, Lenders required external and independent health, safety, environment, and community (HSEC) compliance monitoring of Project activities during construction and operations. The Lender group includes the Asian Development Bank (ADB), and other potential Lenders.

This report details the IESC's third monitoring field visit which took place in Azerbaijan from 17-19 April 2018. It presents the IESC's understanding and assessment of the Project's compliance against Lender standards and provides the status of the Project's environmental and social performance based on information provided by the Project Operator covering the monitoring period and based on the IESC's assessments conducted during the field visit to the Project.

2.2 Project Description

The SD2 Project aims to deliver 16Bcma of gas sales, with peak condensate rates of 85Mbd through the installation of additional wells within the high-pressure gas-condensate SD Contract Area located approximately 100km south east of Baku. Full Field Development (FFD) of the Shah Deniz Contract Area is being pursued in stages.

The SD1 development is in the north-eastern portion of the field and commenced production in 2006. The development included:

- A fixed platform (denoted SD Alpha) with drilling and processing facilities limited to primary separation of gas and liquids; and
- Two marine export pipelines to transport gas and condensate to onshore reception, gas-processing and condensate facilities located at the Sangachal Terminal (ST), approximately 60km south west of Baku.

Oil and gas are currently exported from ST following stabilisation and dehydration respectively via three main export pipelines:

- The Baku-Tbilisi-Ceyhan (BTC) Pipeline transports oil from ST through Azerbaijan, Georgia and Turkey to the Ceyhan Terminal located on the Turkish coast of the Mediterranean Sea. From Ceyhan the oil is distributed to international markets. The pipeline covers a distance of 1,768km and has eight pump stations along the route with the head pump station installed at ST.
- The Western Route Export pipeline is 829km in length and transports oil from ST to the Supsa Terminal located on Georgia's Black Sea coast.
- The South Caucasus Pipeline (SCP) transports gas from ST to Azerbaijan, Georgia, and Turkey. It became operational in late 2006 and began transporting gas to Turkey from the SD Stage 1 project. The SCP is 691km in length and runs parallel to the BTC Pipeline to the Turkish border where it is linked with the Turkish gas distribution network.

The SD2 Project represents the second stage of SD field development and comprises:

- A fixed Shah Deniz Bravo (SDB) platform complex including a Production and Risers (SDB-PR) and a Quarters and Utilities (SDB-QU) platform, bridge linked to the SDB-PR;
- 10 subsea manifolds and 5 associated well clusters, tied back to the fixed SDB platform complex by twin 14" flowlines to each cluster;
- Subsea pipelines from the SDB-PR platform to the ST comprising:
 - Two 32" gas pipelines (for export to the ST);
 - One 16" condensate pipeline (for export to the ST); and
 - One 6" MEG pipeline (for supply to the SDB platform complex);
- Onshore SD2 facilities at the ST located within the SD2 Expansion Area; and
- Up to 26 producer wells.

The Early Infrastructure Works (EIW) were completed at the ST in 2015, prior to installation of the SD2 onshore facilities, and included:

- A new access road;
- Clearance and terracing of the SD2 expansion area; and
- Installation of storm water drainage and surface water/flood protection berms.

Associated Facilities to the SD2 Project include the Amec-Tekfen-Azfen (ATA) Yard, and the Baku Deepwater Jackets Facility (BDJF) where topsides and jackets were constructed respectively; the Serenja Hazardous Waste Treatment Facility (HWTF); and gas export pipeline projects: South Caucasus Pipeline Expansion (SCPx); the Trans Anatolian Pipeline (TANAP) and the Trans Adriatic Pipeline (TAP).

2.3 Construction Status

The SD2 Project construction was approximately 99% complete in terms of engineering, procurement, and construction at the time of the site visit (for the period ending April 2018). The Project remains on target for offshore first gas from Shah Deniz Stage 2 in 2018.

Project activity during the monitoring period (November 2017 – April 2018) included³:

- The drilling of 12 and completion of 8 wells, sufficient for 1st to 3rd gas;
- Completed sail-away and installation of both decks for the Quarters & Utilities and Production & Risers platforms;
- Offshore hook-up and commissioning of the decks (over 90% complete);
- Commencement of offshore installation operations with the new Subsea Construction Vessel Khankendi;
- Sangachal Terminal expansion facilities mechanically completed and hydrocarbon live;
- Area 81 metering station in Georgia in operation and supporting TANAP line-fill;
- Georgia pipeline mechanically complete, Compressor Station 1 declared “ready to Operate”.

2.4 SD2 Project Planned Activities and Milestones for 2018

BP notes that the following activities / milestones are planned for the remainder of 2018⁴:

- Complete pressurisation of TANAP;
- Start-up of Sangachal Debottleneck and Crossover, allowing expanded Sangachal Terminal facilities to process additional gas;
- Commence first commercial SD2 gas deliveries to Turkey in June;
- Achieve first gas from the new offshore Shah Deniz Bravo facilities;
- Continue offshore completion and installation activities to support ramp-up profile.

2.5 Applicable Project Standards

As documented in the SD2 ESIA, the applicable Project standards are based on:

- Standards agreed with the Azerbaijan Ministry of Ecology and Natural Resources and implemented at existing BP operational sites;
- BP corporate governance; and
- Applicable international and national standards.

The review and audit has focused on evaluating social and environmental changes brought about by the Project and on assessing the implementation and effectiveness of mitigation measures. The basis for evaluating the Project in terms of Lender policies is defined as follows:

- Equator Principles III (2013);

³BP, *SD2 Partner and Lender Visit Presentation*. April 2018.

⁴ *Ibid.*

- Relevant EU Directives:
 - EU EIA Directive - 85/337/EEC Council Directive on the assessment of the effects of certain public and private projects on the environment (EIA Directive). The EIA Directive of 1985 has been amended three times, in 1997, in 2003 and in 2009 and is now codified by Directive 2011/92/EU of 13 December 2011.
 - 2009/147/EEC The Birds Directive; and
 - 92/43/EEC Council Directive on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive).
- International Finance Corporation (IFC) Sustainability Framework (2012) including the Environmental and Social Performance Standards (PSs);
- IFC General Environmental Health and Safety (EHS) Guidelines;
- ADB Safeguards Policy Statement (SPS) and other social requirements (ADB Policy on Gender and Development (GAD), ADB's Policy on Incorporation of Social Dimensions into ADB Operations, and ADB's Public Communications Policy);
- The Project's Environmental and Social Management Plans (ESMPs); Environmental and Social Action Plan (ESAP) / Corrective Action Plan; Stakeholder Engagement Plans (SEPs) including internal and external grievance mechanisms; and health and safety provisions and records for the Project;
- Applicable national laws in Azerbaijan;
- Conformance with international environmental agreements and good international industry practice (GIIP); and
- Any other environmental or social regulation or standard as the Lender Group may indicate they expect to apply to the Project.

Project-specific standards include those required under the PSA between the Operator and the Government⁵. The detailed legal regime for the joint development and production sharing of the SD field is set out within the PSA signed by BP, its co-venturers, and SOCAR in June 1996 which was enacted into law in October 1996. The PSA prevails in the event of conflicts with any present or future national legislation, except for the Azerbaijani Constitution; the highest law in the Republic of Azerbaijan. The PSA sets out that petroleum operations shall be undertaken "in a diligent, safe and efficient manner in accordance with the Environmental Standards to minimise any potential disturbance to the general environment, including without limitation the surface, subsurface, sea, air, lakes, rivers, animal life, plant life, crops, other natural resources and property".

2.6 Sources of Information

The IESC completed a site visit to assess compliance with the environmental and social audit criteria from 17-19 April 2019. The site visit included a focus on the status of construction and transition to operations activities, and included meetings at the BP Baku headquarters, a visit to

⁵ Until such time that the SD specific Environmental Protection Standards (EPS) have been signed by all parties as required under Article 26.1 of the PSA, the standards set out in Part II of Appendix 9 to the PSA apply to production activities. The EPS was formally approved via signed Letters from SOCAR and the MENR in 2008. The protocol for their entrance into legal force has been signed by BP on behalf of the SD partners and SOCAR, but has yet to be signed by the MENR.

the onshore production facility at ST, as well as a meeting with local community members from Sangachal village. Following the site visit, documentation / evidence requested during the site visit was sent to the IESC via email on 14 May 2018, with supplementary information emailed to the IESC on 24 May 2018. The monitoring findings are based on:

- Publicly available ESIA documentation;
- Publicly available information on the Project;
- Information provided to the IESC by BP during the site visit on 17-19 April 2018;
- Information provided to the IESC subsequent to the site visit on 17-19 April 2018; and
- Information provided to the IESC during previous monitoring / ESDD exercises in 2014, 2015, 2016, and 2017.

A list of the documents / sources used to prepare this Report, is provided in Appendix A.

2.7 Monitoring Site Visit Attendance

In addition to the IESC team members (John Miragliotta and Catherine Grant), the monitoring site visit was attended by representatives from the ADB, SGC, and BP.

2.8 Report Organisation

This report is organised as follows. All requirements delineated in the Monitoring Scope of Works are covered. The format has been customised slightly to better align with Lender Standards and increase functionality.

- Section 1: Project Summary;
- Section 2: Introduction;
- Section 3: Findings;
- Section 4: Environmental and Social Management Capacity;
- Section 5: Environment;
- Section 6: Social;
- Section 7: Health and Safety
- Section 8: Cultural Heritage.

2.9 Scope of this Review

The IESC reviewed the Operator's available monitoring reports detailing the Project compliance with the Applicable Standards. The IESC's scope includes assessment of the technical adequacy of the Project's ESHS management system and review of any other socio-environmental documentation deemed necessary for its analysis. This includes:

- Any report issued by any Government agencies / ESHS supervision / audit / inspections reports.
- ESHS permits and licenses.
- Internal ESHS inspection and audit reports.

- Environmental Monitoring reports according to the approved ESHS system (effluents, emissions, groundwater, soil, biological monitoring, etc.).
- Implementation monitoring reports of the Fishing Livelihood Management Plan (FLMP)
- Compliance to labour requirements and core labour standards
- Accidents, incidents, and related reports.
- Information disclosure and public consultation processes.
- Community engagement records and reports.
- Grievance procedures, records and reports.
- Non-compliance reports and/or records.
- Contractors' ESHS performance reports.
- ESHS KPIs developed for the Project.
- Status of compliance with any applicable Corrective Action Plan ("CAP").

In executing the scope of work for the desk-based review, the IESC has relied on BP provided data and information to complete this review.

3. FINDINGS

3.1 Description of Non-Conformances

This section tabulates a summary of the Action Items identified by the IESC, based on the outcomes of IESC monitoring. The table below includes newly open items, any follow-ups on issues identified in previous environmental and social monitoring. Any closed recommendations related to previously open issues are also included.

Items in the table are identified by number of the audit visit (X.Y), where Y is the related action item number. The text descriptor may be updated in subsequent monitoring exercises to reflect current conditions; however, the item number will remain as this reflects the same broad issue and its evolution to closure. The relevant project standards and/or reference to the applicable Lender Environmental and Social Standards to which the issue refers are also included.

All issues are categorised as High, Medium, Low, or Observations, reflecting the level of non-conformance in terms of the magnitude and/or on time frame in which an impending risk might occur (short-term, medium-term, long-term). Descriptions of the categories are as follows:

- **High:** Level III critical non-conformance, typically including observed damage to or a reasonable expectation of impending damage or irreversible impact to an identified resource or community and/or a major breach to a commitment as defined in Project documents or the Applicable Lender Environmental and Social Standards. A level III non-conformance can also be based on repeated Level II non-conformances or intentional disregard of specific prohibitions or Project standards;
- **Medium:** Level II non-conformance representing a situation that has not yet resulted in clearly identified damage or irreversible impact to a sensitive or important resource or community, but requires expeditious corrective action and site-specific attention to prevent such effects. A Level II non-conformance can also represent a significant breach of a commitment, or a risk of a significant breach if not expeditiously addressed, requiring corrective action as defined in Project documents or applicable Lender Environmental and Social Standards. A Level II non-conformance can also be based on repeated Level I non-conformances;
- **Low:** Level I non-conformance not consistent with stated commitments as defined in Project documents, but not believed to represent an immediate threat or impact to an identified important resource or community. A Level I non-conformance can also represent a minor breach of a commitment requiring corrective action as defined in applicable Lender Environmental and Social Standards;
- **Observation:** A situation that could eventually become inconsistent with stated commitments as defined in Project documents and/or in the applicable Lender Environmental and Social Standards, and that could lead to non-conformance if not addressed.
- **Closed.**

3.2 Summary Findings Table

The following table references both the non-conforming due diligence findings as well as new items identified in this monitoring exercise.

Abbreviations on standards referenced in the table are as follows:

- IFC PS IFC Performance Standards
- IFC EHS IFC Environment, Health and Safety Guidelines
- ADB SPS ADB Safeguards Policy Statement
- ESMP Specific Environmental and Social Management Plans

Visit / Issue #	Monitoring Exercise	Closing Date	Description	Non-conformance	Reference	Status	Comments / Report Reference
Stakeholder Engagement and Grievance Management							
1.2	Sep 15 May 16 Apr 17 Oct 17 Apr 18	Apr 18	Consultation with affected communities, including communities in the areas of the associated facilities, and key stakeholder groups.	Observation	IFC PS1 SEP ADB SPS ADB Public Communications Policy	Closed	The IESC was able to verify that community consultation is effective through a meeting held with community representatives on 19 April 2018. Communities verified having generally good access to the Operator and its contractors and that regular community consultation and communication is conducted. It can further be confirmed that communities have access to timely, relevant, understandable, and accessible information, that is presented in a culturally appropriate manner, free of manipulation, interference, coercion and intimidation.
1.3	Sep 15 May 16 Apr 17 Oct 17 Apr 18		Communications with external stakeholders, including the methods for screening, tracking and the resulting response in the management system.	Observation	IFC PS1 SEP ADB SPS ADB Public Communications Policy	Open	Evidence of the procedure for external communications, including the methods for screening, tracking and the resulting response in the management system. While the IESC was able to conduct verification with community representatives in April 2018, this item remains Open, as the IESC is unable to verify Operator incorporation of feedback / grievances in management planning and operations, etc.
1.4	Sep 15 May 16 Apr 17 Oct 17 Apr 18		IESC unable to verify that the grievance mechanism is operational and effective for affected communities.	Observation	IFC PS1 SEP ADB SPS ADB Public Communications Policy	Open	Project summary data has been provided on grievances however the IESC has been unable to verify this issue adequately. This includes whether issues that have been raised are being further considered and incorporated in planning and operations, whether grievances are being managed/resolved within the timeframes provided in the grievance mechanism, to the acknowledgement / satisfaction of both parties, and whether grievance summary feedback is

							being effectively reported to affected communities. This item remains outstanding as at the second monitoring visit (April 2018).
2.10	Apr 17 Oct 17 Apr 18	Apr 18	IESC verification required of independence of newly established EITC process, including reporting criteria, and ability of civil society to participate in the resource governance space (and by association, open and free engagement with the Operator).	Observation	IFC PS1 ADB SPS ADB Public Communications Policy	Closed	Azerbaijan has recently withdrawn from the Extractive Industries Transparency Initiative (EITI) and established its own initiative, the Extractive Industries Transparency Commission (EITC). IESC is concerned about the potential lack of independent, global oversight of the newly established EITC process, and the ability for the EITC to choose its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI. The IESC is reassured by the Operator's April 2018 update, including independent international oversight of the EITC, and inclusion of civil society actors in EITC processes. This item is now closed (April 2018)
Community Health, Safety, and Security							
1.7	Sep 15 Apr 17 Oct 17 Apr 18		No monitoring or management plan in place to determine or respond to potential impacts to communities in the Project area due to population influx.	Observation	IFC PS4 IFC EHS 23 ADB's policy on Incorporation of Social Dimensions into ADB Operations	Open	Influx was scoped out at the ESIA Phase due to a closed camp, however with demobilisation ongoing of the construction workforce and fewer forward employment opportunities available in the current Azeri market, the mechanism for tracking potential impacts of the demanned workforce on communities (e.g. influx, antisocial behaviour) remains unclear. IESC was able to discuss this with communities during a community meeting during the April 2018 Site Visit. It was noted that local employment figures are questioned by community members, who claim that many "local" employees on the Project are not actually from local villages. In the current phase of demobilisation on the Project and fewer employment opportunities, this issue may be exacerbated at the local level should non-

							locals or perceived non-locals be provided with employment opportunities. The IESC will seek additional verification at the next monitoring opportunity as to the protocols employed by the Operator and its contractors to assess and establish employment applicants' "local" status.
--	--	--	--	--	--	--	---

3.3 Summary of Incidents of Violations and Non-Compliance⁶

Issue	Summary Detail
Recorded dates and responsible agencies	No regulator action reported
Nature of non-conformance	
Violation or non-conformance based on what environmental standards and regulations	
Results of investigations and reviews	
Corrective actions, deadlines, identification of responsible parties; Short term remedial action; Long term preventative measures	

3.4 Summary of Incidents of Environmental, Health Concerns and Safety Accidents⁷

Issue	Environment Incident Summary ⁸	OHS Incident Summary ⁹
Incident recorded dates and responsible agencies	2 reportable incidents (spills >50l), dates of occurrence: 21/12/17 and 08/02/18. See Section 5 for further detail on these incidents.	<ul style="list-style-type: none"> • 0 high potential incidents in the monitoring period; • 0 lost time incidents requiring a day away from work in the monitoring period; • 0 reportable incidents (safety) in the monitoring period; • 0 reportable incidents (health). Drilling Performance:

⁶ The evidence provided spans the monitoring period from November 2017 to April 2018 (up to the April 19), therefore any incidents occurring between the end of the site visit (19 April) to the end of April may not be reflected in the evidence / report.

⁷ *Ibid.*

⁸ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

⁹ *Ibid.*

		<ul style="list-style-type: none"> • 2 high potential incidents (2018), 0 high potential incidents (2017);¹⁰ • Fire / explosions – 1 (2018), and 1 (2017); • Well Control Incidents (Level 2): 0 (2017 and 2018); • Well Control Incidents (Level 3): 2 (2017) and 2 (2018); • Recordable injuries: 2 (2017) and 0 (2018).
Scale of damage / injury (if any)	<p><u>Spill 1 (21/12/2017)</u>: Two technicians observed leakage on Orifice Plate Flow meter line end plug of approximately 150 litres. Spill was contained, and spill kits were utilised.</p> <p><u>Spill 2 (08/02/18)</u>: During a refilling operation of Baker Hughes temporary diesel storage tank, the tank was overfilled and approximately 900 litres was lost to the temporary bund area.</p> <p>During initial recovery the bund received minor damage resulting in approximately 30 litres of diesel spilling to the asphalt. Material was collected from the bund area.</p>	None reported
Authorities in charge of investigation / recording	None required for the above listed spills. In the event that authorities are involved, then Ministry of Environment and Natural Resources (MENR)	Ministry of Labour and Social Protection of the Population (MLSPP)
Results of investigations and reviews	<p>Results provided for Spill 2, as follows:</p> <ul style="list-style-type: none"> • Procedure not followed or reviewed prior to the task • Complacency of the personnel involved and poor communication. The operator and the diesel tanker driver did not speak the same language. • Permit to Work (PTW) and Risk Assessment (RA) were not specific enough and did not mention the BHI procedure document number, document title or that this is a two (2) person task. • Incident Response Team should have been informed directly by the Contractor team and not have waited for BP HSE to make the call. 	None reported

¹⁰ Data provided is for 2017, and not just the monitoring period (November and December 2017).

	<ul style="list-style-type: none"> Contractor personnel should not have attempted to clean the spill within the bund, which may have stopped the 30 litre spill to the asphalt. Note: The bund had been previously filled and drained of rain water without leaking 	
Corrective actions, deadlines, identification of responsible parties Short term remedial action Long term preventative measures	<p>Corrective actions, deadlines, identification of responsible parties, short term remedial actions, long term preventative measures:</p> <ul style="list-style-type: none"> Procedure to be updated including detailed operational steps and diesel storage tank information, including valve operations. Safety stand down to be held with both day and night shift personnel to review the incident and explain initial investigation findings what is being put in place to prevent a reoccurrence. Contractor informed not to attempt clean up, without assessing the incident first Communication flow chart to be updated to reflect the IRT contact numbers. PTW and RA to be updated to include IRT contact details, procedure number and title and state clearly that refuelling is a two (2) person operation. Remove all mobile phones from personnel whom are operating machinery and equipment on site New bund to be constructed and the diesel tanks to be relocated. <p>Key learnings:</p> <ul style="list-style-type: none"> Staff can become complacent due to the repetitive nature of their tasks, this operation had been completed almost daily for over 4 months, with no incidents or spills. During Tool Box Talks discuss in detail all tasks to be performed that shift to ensure tasks are not treated with complacency. All parties involved in the work should be fully aware of the risks and the controls to follow. Supervision, self-verification and oversight should include ancillary tasks to ensure that all control measures remain effective 	OHS Management Plan

<p>Other environmental, health and safety initiatives which have been planned or implemented</p>	<ul style="list-style-type: none"> • Continuation of the “Finish Strong Campaign”.¹¹ • Waste management campaign conducted at the Marine Base.¹² • SD2 Environmental Awareness Sessions. 	<ul style="list-style-type: none"> • Continuation of the “Finish Strong Campaign”, including focus areas, among others:¹³ <ul style="list-style-type: none"> ○ Understanding of emergency response arrangements; ○ Ladder inspections; ○ HSE communications; ○ Communication of hazards from PTW to the work crew; ○ Review of long term isolations • Campaigns implemented during monitoring period targeting various issues, including, “Stop the Job”, “Prepare for Winter,” “Keep Your Hands Safe”, among others. • Time-Out for Safety conversations held on safe access / egress and safety rules regarding slip/trip hazards, lighting and emergency doors at Sangachal, among others.¹⁴ • Specific tool box talks conducted on safety glasses at SD2 HUC.
---	---	---

¹¹ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

¹² SD2 Partner Monthly Report. January 2018.

¹³BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

¹⁴ SD2 Partner Monthly Report. January 2018.

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT CAPACITY

Compliance summary:

- 2 Observations were able to be closed in this monitoring period:
 - Verification was sought by the IESC on the effectiveness of engagement with key stakeholders such as community members and representatives, fisherfolk, and local government representatives. During this monitoring Site Visit the IESC was able to verify that community consultation is effective through a meeting held with community representatives on 19 April 2018. Communities confirmed having generally good access to the Operator and its contractors and that regular community consultation and communication is conducted that provides communities with access to timely, relevant, understandable, and accessible information, that is presented in a culturally appropriate manner, free of manipulation, interference, coercion and intimidation.
 - The IESC was concerned about the potential lack of independent, global oversight of the newly established EITC process, and the ability for the EITC to choose its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI. The IESC is reassured by the Operator's April 2018 update, including independent international oversight of the EITC, and inclusion of civil society actors in EITC processes.
- 2 Observations remain open (additional substantiation of the findings was possible):
 - Evidence of the procedure for external communications, including the methods for screening, tracking and the resulting response in the management system. While the IESC was able to conduct verification with community representatives in April 2018, this item remains Open, as the IESC is unable to verify Operator incorporation of feedback / grievances in management planning and operations, etc.
 - Project summary data has been provided on grievances however the IESC has been unable to verify this issue adequately. This includes whether issues that have been raised are being further considered and incorporated in planning and operations, whether grievances are being managed/resolved within the timeframes provided in the grievance mechanism, to the acknowledgement / satisfaction of both parties, and whether grievance summary feedback is being effectively reported to affected communities.

4.1 Environmental and Social Management System

4.1.1 Overview

The monitoring confirmed the ongoing implementation of the SD2 environment, health and safety management system in line with BP's corporate Health, Safety, Security and Environment (HSSE) commitment statement Project policies. Specifically, the contractor HSSE Plans are developed in alignment with BP's Project and Program HSSE Plans which provide a rigorous framework for ensuring the protection of worker safety, compliance with HSSE requirements, social

responsibility, and protection of the environment. The documents reviewed¹⁵ demonstrated a clear commitment to HSSE policies and achieving leading practice performance objectives for prevention of accidents, prevention of pollution, management of waste and engagement with nearby communities, among others. Competent teams of health, safety, environment, and social professionals who are effectively resourced and trained implement the health, safety, environment, and social management systems in place at the SD2 constructions sites.

The BP oversight of contractors to ensure compliance with HSSE requirements is clearly evident through a structured program of HSSE audits, contractor self-verification and BP HSSE oversight, as demonstrated in the Project Monthly Reports (November 2017 – March 2018). The oversight process includes BP HSE personnel actively engaging with contractors during construction activities to observe safety behaviours and develop HSE leadership. BP's HSSE management systems being implemented for the SD2 Project are mature systems that have been effective in management of BP's operational HSSE risks in the Caspian region. The Operator enforces BP's 8 Golden Rules for safety for all Project-related activities undertaken by BP personnel, contractors, and sub-contractors. The ST and offshore facility construction contractor HSSE plans are aligned with these systems and include robust processes for: contractor and sub-contractor management; legal compliance; crisis and emergency management; reporting of performance; HSE Organisation; and, assurance planning.

The risk management tools employed for the SD2 Project construction are proven processes that have been effective for existing operations at SD and throughout BP's operations in the Caspian Region. The risk management processes include clear methods for identification of health, safety and environmental risks and include consideration of health, public safety, and security risks to communities. Risk assessments are undertaken through the ESIA, ENVID, HAZOP and HAZID processes with input from workers. Risk registers are maintained that prioritise significant risks and identify risk management controls that apply the mitigation hierarchy; whereby risks are avoided where possible or mitigated to ensure risks are acceptable where avoidance is not possible.

The SD2 HSSE risk register is maintained through the Project Management Control System (PMCS), an electronic tool to facilitate the capture, assessment, monitoring, controlling and communication of project risk. The construction facilities utilise clearly defined permit to work systems for hazardous activities such that safety controls are managed, communicated, and reviewed for each activity. Permit to work process provide effective controls for working at heights, access to confined spaces, electrical work, hot work and for working within excavations. The SD2 Project has implemented Risk – Talk – Check (RTC) processes which are designed to facilitate worker involvement with the risk management and hazard perception to ensure HSSE risks are understood and are being effectively implemented.

The communication of HSSE related issues and reporting of performance was evident through the both the desk-based review of documentation and the site visit meetings with BP and observations on site. This includes the scheduling of regular formal and informal meetings and recording of minutes. Communications with Project workers include the opportunity for worker input to HSSE programmes and clear authority for workers to stop work if unsafe practices are observed. Further, a philosophy of positive reinforcement in relation to the authority to stop work in the case of unsafe conditions is evident, with workers encouraged to “stand down and also

¹⁵ See Appendix A for Document List.

stand up”.¹⁶ HSSE reporting is a continuous process with various formats used to track HSSE performance against Project targets and statutory requirements.

BP's HSSE requirements include the requirement for contractor HSSE management systems be aligned with ISO standards: ISO14001 and OHSAS18001. The ATA and BOS Shelf contractors are externally certified to ISO standards and BP holds ISO14001 certification for its regional operations in the Caspian.

BP's AGT Region manages BP's operation in Azerbaijan and implements environmental and social management programmes through the Local Operating Management System (LOMS). The environmental management component of the LOMS is certified to the ISO14001 standard for environmental management systems.

The Mobile Offshore Drilling Unit (MODU) facility, used for offshore well development drilling, is operated by third party contractors who are required to implement their own independent Environmental Management System (EMS) already in place. Alignment of the plans, procedures, and reporting requirements of the rig and AGT Region EMS is achieved through the development of an EMS interface document which defines clearly how all activities will be managed to ensure a safe and environmentally acceptable working environment, including the roles and responsibilities relevant to environmental management. The EMS interface document is a live document and is reviewed annually at a minimum. Both the BP EMS and the Rig Operator EMS monitor the same targets and objectives that are separately audited as part of their internal review process. Communications lines are in place to ensure the effective sharing of the findings and action lists.

4.1.2 Transition to Operations

It is evident that a robust process has been implemented to ensure a managed transition to operations of the environmental and social management system. The Operator developed a range of measures to ensure that the environmental and social aspects and impacts are effectively managed during the process of transition from contractor managed construction activities, through to commissioning and ultimately to the implementation of operations. For example, at the ST, all systems (including HSE) are now under operational control, and those systems that are still at the construction phase (only 3 at ST) are ring-fenced and barricaded. These areas are under a single point of accountability, using the same permit system as operations and fully integrated within the other operational processes. The IESC was able to observe the areas still marked as construction phase during the ST tour, and notes effective barricading / signage.

To mark the transition to operational control, site integration (SD1 and SD2) was completed on 06 March 2018, with a full site muster conducted on 09 March 2018. All responsibilities for HSE are now being reported through the site-wide HSE system. The system is fully integrated (including those remaining construction phase aspects). The IESC also notes that the Operator has ensured continuity / familiarity between phases of the project regarding HSEC by ensuring that operations phase personnel were embedded within construction phase teams.¹⁷

At the ST, the start-up assurance process was commencing. Key to this process is the “go-no-go assurance” to decide whether to bring in hydrocarbons and includes comprehensive checklists to ensure all systems are ready for hydrocarbons. The IESC further questioned whether there

¹⁶ Meeting with BP on 18 April 2018.

¹⁷ Sangachal Terminal Meeting – Onshore Facilities. 19 April 2018.

have been any issues / hold-ups around the “go-no-go assurance process” so far. The Operator noted that several actions are ongoing – leak testing, faulty valve replacement, etc., but that these haven't been specific failures of the system, rather all issues have been foreseen and planned and are a routine part of the commissioning process. Another layer of assurance includes the engagement of an external team to check compliance tests conducted and ensure all systems are ready. Thereafter, a final certificate to operate will be handed over post-plant performance testing (approximately 2-3 months into operations). Until that point, the commissioning team will remain on site.

Furthermore, operations teams are aware and have been trained in all operations phase ESIA commitments. The ESIA Commitment Compliance Register was noted as a key tool in the respect.¹⁸ The register draws together all ESIA commitments into a single excel-based document for each delivery unit. Tasks are categorised based on type of evidence required e.g., document, record or observation, monthly checks are undertaken, and status reports prepared, an ESIA performance report is issued, findings are discussed with management and contractors, and corrective actions tracked to completion.

4.2 Management Programs

The SD2 Project and delivery teams are required to use the ESMMP as the framework to deliver the environmental and social requirements, as defined by applicable legal, contractual, and other requirements, including ESIA commitments. The ESMMP includes specific requirements for various work packages to manage and monitor environmental performance against the Environmental Design verification register, the SD2 Environmental and Social Compliance Register that includes ESIA commitments. As noted above, a key focus of the SD2 HSEC management has been on ensuring effective transition to operations, and specifically the close-out and/or handover of ESIA and permit commitments to the operational ESMMP.

The key management program implemented in relation to the transition to operations, has been the “Finish Strong Campaign”, the intent of which is to “reinforce a strong safety leadership culture across all sites”, “introduce a simple dashboard to improve visibility / transparency of everything we do”, and “measure our performance regularly, take action to recognise strong performance and take steps to address gaps”. The key principles of the rollout of the program include, among others using what is already in place, i.e. no new processes, focusing on commissioning where this is undertaken, using the campaign to highlight what is changing in how the Company works as it moves through the phases of work and as energy is introduced to the plant and the risk profile increases.

4.3 Organisational Capacity and Competence

It has, in previous monitoring reports, been observed by the IESC that the Operator has assembled a team of competent professionals to manage the environmental and social performance function from within the BP AGT Regions Team, supported by external experts as required. SD2 Operator HSE personnel are now established to fulfil the organisational requirements for commissioning, hand-over and operations. The IESC discussed organisational structures and key roles for the ST operator's team and confirmed that the HSE resource allocations are appropriate to implement the HSE programmes in place for the commissioning and operational HSE programmes. The IESC was able to verify demonstrated ongoing organisational capacity and competence is in place, specifically through the operational team

¹⁸ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

personnel having been involved throughout the constructions phase to ensure that there is deep knowledge and experience embedded in the key Project processes.

The SD2 Project continues to measure and review the effectiveness of its HSE management systems, including the capability and competence of personnel, through:

- BP Corporate HSE assurance audits, including compliance with operator requirements, commitments, and statutory obligations;
- BP Self verification and reporting against key HSE indicators and annual performance review or organisational HSE effectiveness and capability; and
- BP's HSE oversight of construction contractors through field observations; verification of HSE plan implementation and review of HSE improvement action outcomes and effectiveness.

Core HSE functions are supplemented by external contractors for waste management, via a centralised waste management service provider on construction sites and emergency response capability for fabrication and offshore activities where spills to the marine environment are a significant risk.

The SD2 onshore social impacts and community programmes are still implemented between the contractor Community Liaison Officers and BP Regional community/social team personnel. The contractors are responsible for the day-to-day liaison and engagement with local communities relevant to construction activities and workforce, including management of community grievances relevant to construction environmental impacts, social issues, and employment. The BP Regional team provide oversight of the contractor social impact management processes and provide a broader social engagement function relevant to BP's activities in the Caspian, including all onshore and offshore activities, community development initiatives and implementation of strategic social programmes to fulfil socio-economic commitments and obligations of the SD2 Project.

4.4 Emergency Preparedness and Response

Emergencies are managed for the SD2 Project through the BP Crisis Management and Emergency Response framework which includes an established response mechanism, site response teams, country-based incident management team and regional business support team and an executive support team based in London. BP has a Baku emergency response team consisting of 120 personnel and mutual operating plan on management of emergency situations between the BP AGT Region and the Azerbaijani Ministry of Emergency Situations.

The SD2 Project has identified potential emergency scenarios that may impact on health, safety, the environment, and communities. Emergency response plans are developed for significant scenarios and training drills are undertaken on a regular basis to ensure operational readiness and familiarity with emergency response requirements.

Emergency response capability is maintained at all work areas including medical and first aid facilities, on site ambulances, incident management teams and rescue capability. Full integration of emergency response capabilities has occurred at ST. The IESC queried the access to a refuge or similar at the temporary SD2 Project offices (which remain separate to the main operations offices) in a hydrocarbon live emergency situation. The Operator noted that there is a refuge in FOB close to the SD2 Project offices, which include a secondary control room, workshop and back up station due to the distance to operations.

The SD2 onshore Project undertakes at least 20 emergency response exercise drills per year, of these, 2 to 3 exercises involve external and government emergency response providers in addition to the BP-AGT emergency team. The offshore delivery units undertake 6-7 emergency response exercises annually. Each work site undertakes a weekly site muster and evacuation drill. Records of emergency response drills, exercise reports and debrief reports were reviewed by the IESC.

The IESC viewed 2 emergency response exercise report (oil spill response) conducted during the November 2017 – April 2018 monitoring period, both of which were sufficient in level of detail, scope and participation to demonstrate compliance (see also Section 7.2 on community health, safety, and security). Project monthly reports provided to the IESC for the monitoring period also indicate the conduct of emergency drills at Project sites during the monitoring period, including fire drills, emergency evacuation drills, medivac and oil spill drills. The IESC was not able to obtain any emergency response exercise reports for specifically in relation to drilling and loss of containment, and will request that these are provided as evidence at the next monitoring opportunity.

BP's emergency response capability includes global contracts with two well control providers with capability to deploy equipment, including cap and stack containment, and expertise to any of BP's operations throughout the world. It is noted that this equipment is located in the USA and there is no ready access to well control containment equipment for the Caspian drilling and operational activities.

4.5 Stakeholder Engagement

Stakeholder Engagement for SD2 is conducted by both BP and TKAZ (construction contractor), both of which employ community liaison officers in the local communities surrounding ST. The community liaison officers provide a conduit for communications and engagement with local communities through provision of information and receiving of grievances. TKAZ and BP have community engagement personnel within their teams at the SD2 onshore construction site at ST. BP-led meetings in these communities have been primarily aimed at fishing livelihoods management plan issues, and more recently (in partnership with TKAZ) regarding employment and de-manning initiatives and activities on the Project. It was noted during the Site Visit that the SEP has remained consistent through the transition from a construction phase management plan into an operations phase management plan.

The Operator provided a summary of key engagement conducted with local communities during the monitoring period, including photographic evidence of engagement events and engagement materials deployed (see below for examples provided). Furthermore, the Operator organised for the IESC to conduct a community meeting in Sangachal town (closest town to ST) on the 19th April 2018.

During the monitoring period, the IESC understands that stakeholder engagement has focused on engaging with communities about the ongoing and planned noise monitoring and noise associated with the pipeline commissioning phase activities and potential temporary night time disturbances. Posters were displayed in central community locations to inform residents around the ST of these activities. The Operator also held a Town Hall style community meeting in January 2018 to provide a specific SD2 Project Environmental Update to interested community members. To advertise the meeting, posters were displayed in Azerbaijani at local community centres, providing an update on the environmental aspects of the SD2 Project (see below Figure 2). Key topics presented at the meeting included the project status and transition to operations; noise

monitoring; cultural heritage monitoring; environmental monitoring during operations; fishing livelihoods; SD2 onshore start up; and key contacts for grievances. The IESC notes the timely nature of this engagement, prior to commencement of operations and in preparation for commissioning activities. Further, it is noted that the information materials provided are in non-technical language and therefore appropriate, understandable and accessible to local communities (the English translation is presented in Figure 2). The information presented disclosed key upcoming project activities, purpose, nature, scale, and duration thereof, as well as any risks or impacts on stakeholders, and reiterates ways in which communities can raise grievances should they wish to.¹⁹



Credit: BP. SD2 Partner and Lender Visit Presentation. April 2018.

Figure 1 Posters Notifying Communities Around ST About Noise

¹⁹ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

SD2 Project Update - Environmental



Project Status –

- ❖ Majority of the main SD2 construction activities at the Terminal are complete
- ❖ Demobilisation of temporary facilities is in progress
- ❖ Pipelines from offshore to the Terminal have been installed
- ❖ Commissioning and start up activities at the terminal planned to occur into 2018 and will continue until steady state operation is achieved



Noise Monitoring

- ❖ Noise monitoring has been ongoing throughout SD2 construction at community locations surrounding the Terminal
- ❖ 22 rounds of day time monitoring and 6 rounds of night time monitoring completed
- ❖ No exceedances of the noise limits for the Project due to SD2 construction activities have been recorded
- ❖ Higher noise levels recorded have been due to other sources not related to SD2 construction activities including vehicles on the Salyan Highway and trains passing
- ❖ Community noise monitoring will continue during future SD2 commissioning and start-up activities



Fishing Livelihoods

- ❖ A management plan and compensation procedure was developed in liaison with the small-scale fishermen who fish within Sangachal Bay to manage the potential economic impact of the Marine Exclusion Zone (MEZ) during pipeline installation
- ❖ All persons eligible for compensation were systematically identified, consulted during implementation of the plan
- ❖ All persons eligible for compensation have been paid
- ❖ The MEZ was removed in September 2015 and all fishermen are now free to fish in the area as normal



Cultural Heritage Monitoring

- ❖ Local archaeologists from the Institute of Archaeology and Ethnography have been engaged to observe the onshore construction works associated with the SD2 Project for the duration of the works
- ❖ Over this period no significant archaeological sites or archaeological features were found
- ❖ Archaeological finds identified include fragments of pottery (sherds) from the medieval and post medieval period
- ❖ Likely to originate from the travelers that passed through the area and potentially from milk churns and storage jars used by semi-nomadic cattle herders.
- ❖ As ground works are now finished the SD2 cultural heritage programme is now complete



SD2 Onshore Start Up

- ❖ As the project moves from construction to operation, gas production ramps up as facilities are brought on line
- ❖ For safety reasons it may be necessary to send gas to the SD2 flare at various times during start up
- ❖ Noise levels during flaring will be similar in scale to those during flaring events that occur in current Sangachal operations
- ❖ Impacts to local communities with respect to noise and air quality have been assessed as part of the ESIA process. The assessment showed that predicted emission and noise levels meet legislative requirements

Environmental Monitoring During Operations

- ❖ Future monitoring during the operational phase of the project will be conducted as part of the routine BP monitoring programme



Who to Contact if you have a Grievance

- ❖ For employment and HR issues: Galib Guluzade, TKAZ HR manager: 055 999 19 33
- ❖ For all other issues contact: Azad Gumbatov, BP Community Liaison Officer: 055 225 02 45 or Kamil Sadikhov, BP Community Liaison Officer: 055 225 02 51

Figure 2 Community Poster - SD2 Project Update - Environmental

Since the initial ESDD of the SD2 Project in 2014, the IESC has not been provided the opportunity to meet with local communities to conduct verification of stakeholder engagement and grievance management activities. These issues were deemed Observations (audit/monitoring findings) and not regarded as non-compliances with Lender requirements, as the IESC had access to Operator Management Plans (SEP and Grievance Mechanism) as well as ongoing provision of engagement and grievance summary data at monitoring exercises, which demonstrated compliance with the key Lender provisions for stakeholder engagement and grievance management. However, the IESC has continued to seek verification thereof with local communities, and this was largely able to occur during this site visit. The Operator invited key community representatives to a meeting in Sangachal Village. The attendees numbered around 20 men, representing key stakeholder groups or holding leadership positions in their community. Attendees included:

- Leader of the Sangachal Community;

- Community elders;
- Chairman of the Sangachal Municipality;
- A retired representative from the military;
- Representatives of the Sangachal fishing community;
- A community member employed as a driver at the ST;
- A representative from Umid district;
- A representative from the Umid internally displaced community;
- A local housing representative; and
- Head of a community club, among others.

The meeting was attended by both IESC team members, 1 representative from the ADB, and 1 from Lukoil Overseas Shah Deniz Limited (another of the Shah Deniz beneficiaries), in addition to key Operator community liaison representatives and HSE team members. The Operator provided a translator to the IESC team. Important to the IESC was that the meeting participants were comfortable and at ease in discussions, and therefore the meeting was set-up informally in an effort to maximise participation.

The IESC commenced the meeting by providing an introduction to the purpose of the meeting (to verify the Project's community engagement and grievance management) and the role of the IESC. It was noted that attendees' names would not be published in the formal report (i.e. this report). From the outset of the meeting, it was clear to the IESC that all attendees were comfortable in participating and providing their opinions, and that there was a general familiarity by attendees with the key Project stakeholder liaison personnel. Initial discussion focused on the community's key modes of communication with the Operator / contractors / ST on the SD2 Project. Community representatives specified that communication is mostly conducted with the ST Public Relations Department, and that communities are generally aware of the telephone numbers used to reach the Public Relations team. It was confirmed that these contact details are known as they are placed by the Project on community notice boards and at the Project Information Centres. Furthermore, communities acknowledged that SD2-related meetings are advertised on these same notice boards within communities and are open for public attendance. Community representatives also noted that in the event of an issue or concern, they tend to contact the Terminal Public Relations Department, rather than making complaints to Government authorities.

Sangachal Fishermen at the meeting expressed gratitude for BP's assistance in compensating for lost income and for the relocation of fishing camps due to the impacts from the SD2 construction activities. The fishermen present in the meeting voiced that communications between the company and fishermen was very good and the company addressed issues/concerns quickly.

The IESC is able to conclude that in relation to community level stakeholder engagement, there is generally good access to the Operator and its contractors and that regular community consultation and communication is conducted. It can further be confirmed that communities have access to timely, relevant, understandable, and accessible information, that is presented in a culturally appropriate manner, free of manipulation, interference, coercion and intimidation. As the meeting was not attended by any women, the IESC was unable to verify whether any gender-specific issues exist. The IESC will seek further discussion and confirmation with women

stakeholders at future site visits. Further discussion on grievance management is included in Section 4.6.

The IESC observes that now that operations management plans are in place, this represents a timely opportunity to publicly disclose them, similar to the disclosure conducted in September 2017 of the construction management plans²⁰, thereby fulfilling the requirements for public disclosure. The IESC raised the possibility of public disclosure with the Operator and was advised that this is currently under consideration. The IESC will follow this up at the next monitoring opportunity.

In relation to formal engagement with authorities and civil society actors, the Operator advised that Joint Review Sessions were conducted during this monitoring period. These sessions are conducted to provide the Azerbaijan Authorities with assurance on the completion of SD2 Project construction activities and readiness for operation. A joint review process has been initiated prior to hook-up and commissioning of the Project. The joint review is divided into two separate processes for the offshore facilities (including subsea pipelines) and onshore facilities, including participation of the following State Authorities²¹:

- Ministry for Energy;
- State Oil Company of Azerbaijan Republic (SOCAR);
- State Committee for Supervision of the Safe Conduct of Work in Industry (MES);
- Ministry for Environmental and Natural Resources (MENR);
- Ministry of Emergency Situations (MES);
- State Committee for Construction and Architecture (for Onshore Facilities);
- State Labour Inspectorate;
- State Fire Brigade (MES);
- Navy Hydrography Services; and
- Ministry of Health.

For offshore facilities, this review was held on the 07th June 2017, and for onshore facilities this was held on the 06th December 2017. The Operator advised that both the onshore and offshore components of the Project were formally accepted in the Joint Review Sessions, and that no further follow-up action is required. This formally closes out a requirement of the PSA, and no further permitting or subsidiary processes are required in this regard.

4.5.1 Human Rights and Transparency

BP adheres to the provisions on human rights as set out in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. These include the rights of the Company's workforce and those living in communities affected by its activities. BP sets out its commitments in its human rights policy and code of conduct. The Company operating management system (OMS) contains guidance on respecting the rights of workers and community members. In 2016 (*2017 BP Azerbaijan Sustainability Report* not available at time of writing), BP continued to identify, and address potential human rights

²⁰ The disclosure of the construction management was a long-standing non-conformance item from the initial ESDD of the Project, which was finally closed out with the public disclosure of the construction management plans in September 2017.

²¹ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

impacts in the areas of recruitment, workforce welfare, land acquisition and livelihood, as well as other related issues in affected communities. Specific activities have included quarterly social risk review sessions, a revision of the human rights response plan; technician forums (two in Azerbaijan, one in Georgia); a people forum day in Ankara; over 650 BP employees have participated in training sessions on the Code of Conduct (which includes human rights policy), regular human resources visits to offshore and onshore sites; and the establishment of monthly labour management forums and quarterly labour management committees. BP is currently in the process of aligning its business with the UN Guiding Principles on Business and Human Rights, using a risk-based approach.²²

A focus area of the IESC in the previous 2 monitoring exercises has been in relation to human rights and transparency given the withdrawal of Azerbaijan from the Extractive Industries Transparency Initiative (EITI) in March 2017. Suspension was based on Azerbaijan's lack of progress on implementation of recommended reforms in relation to human rights and civil society, specifically, the lack of an enabling environment for civil society, which is a violation of the initiative's requirements on multi-stakeholder engagement and of its Civil Society Protocol²³. Subsequent to its withdrawal from the EITI, Azerbaijan established its own independent Extractive Industries Transparency Commission (EITC) on the 05th April 2017. The EITC is to ensure transparency in extractive industries by setting up the process for reporting about state revenues from production of natural resources, similar to the EITI. The process intends to comply with relevant international requirements and obligations and includes involvement of relevant state institutions as well as foreign companies and civil society actors working in Azerbaijan's extractive industries.

The IESC noted concern about the potential lack of independent global oversight of the EITC, the ability for the EITC to select its own reporting criteria which may exclude those areas for which Azerbaijan was suspended from the EITI, and the ability of civil society to freely participate in the resource governance space in Azerbaijan (which may also impede the Operator's ability to conduct effective engagement with these stakeholders). The IESC understands that BP is remains actively involved in Azerbaijan's EITC activities, as reported during the site visit. The Operator has indicated that upon the formal inauguration of the EITC, extractives companies in Azerbaijan, including BP, signed an agreement (similar in content to the previous memorandum of understanding with the EITI) with the EITC, as a sign of commitment to transparency. Moreover, it is noted that the EITC has representatives from extractive companies, Government, and civil society. The IESC also notes the participation of civil society actors, and international organisations, among others at EITC meetings, in addition to the engagement of an international firm (Moore Stephens) to prepare the inaugural report of the EITC. The IESC confirmed the ongoing participation of the Operator in the EITC process during the site visit, as well as ongoing third-party oversight of the process and inclusion of civil society actors in EITC processes.

The IESC can therefore formally close out this observation.

4.6 Grievance Mechanism

The responsibility for the grievance management process, along with the SEP and other management plans, has been transferred to the operations team with no change to the process from that which was in place during construction. The Operator reports that the vast majority of issues raised in community meetings and through the grievance mechanism relate to employment

²² BP Azerbaijan, *Sustainability Report*, 2016.

²³ EITI Announcement, 2017. "Azerbaijan Withdraws from the EITI". <https://eiti.org/news/azerbaijan-withdraws-from-eiti>

opportunities, however additional community concerns and BP/contractor response are summarised below:²⁴

Table 2 SD2 Community Grievance Summary and BP/Contractor Response

Concern Raised	Response
Project is demobilising workforce and lack of employment opportunities	Response to communities on nature of the project and that the construction is ending and moving into operations phase
Request for BP to build a recreational centre in Sangachal settlement	Communicated strategy of enterprise development and education focus and existing programmes and opportunities
Request for additional Social investment/infrastructure projects similar to BTC/SCP times	Communicated strategy of enterprise development and education focus and existing programmes and opportunities
Concerns about environmental impacts and request for environmental monitoring results	Communicated monitoring programmes and results

Further to the above, the key issues raised by the community representatives at the community meeting attended by the IESC during the site visit corroborate this, and include:

- Environmental concerns raised by the stakeholders included degraded air quality from the BP ST and other industrial sources nearby. Some community members believe that poor air quality is resulting in impacts to the health of the local community with increases in some disease. BP provides data regarding air emissions and noise through meetings and printed information. However, the IESC notes that there appears to be a low level of trust in the information provided and ongoing health concerns have not been allayed by the data provided.
- The changes from a ground flare to an elevated flare several years ago resulted in community concerns and public meetings to provide information on the emissions and risks posed by the elevated flare. Concerns were raised then regarding the gasses released from flaring and the impacts of this on communities.
- Many community members voiced that BP was a good company and has provided economic growth for the community and the country, but that this should not be at the expense of clean air and water in local communities. The information provided by BP that emissions to air are within relevant national and international standards is viewed with scepticism by some local residents as this doesn't appear to match the community perceptions that air quality is getting worse.
- BP's communications include discussion of outcomes from air dispersion modelling of ST emissions and that the emissions from general industrial expansion in the Sangachal area has increased over recent years. The IESC notes that community members do not appear to discriminate between the sources of emissions and see that expansion of the ST has resulted in increased emissions, especially with more visible flares.
- Community members raised concern that there is no compensation of impacts on the health of residents by industrial expansion. The communities do not receive any additional benefits such as increased access to health care or fresh food (milk).

²⁴ SD2 Grievance Summary.

- Community members noted increased dust emissions due to the construction of the terminal expansion.

Based on the feedback provided to the IESC in the community meeting, the IESC notes that there appears to be a low level of trust in relation to the information provided by the Operator / contractors on environmental emissions, particularly regarding the health impacts thereof. Further, the communication by the Operator / contractors of monitoring results and confirmation that results are within the legal parameters have not allayed these community concerns. The IESC is unable to adequately assess how the Operator / contractors are addressing the issues raised using the summary information provided by the Operator on grievances lodged and the resolution thereof during the monitoring period (Table 1). It is clear to the IESC that communications and engagement processes are in place and broadly effective. However, beyond communications, the IESC cannot establish through the information provided by the Operator, how and whether these issues that have been raised are being further considered and incorporated in planning and operations. In addition, the IESC is unable to determine whether grievances are being managed/resolved within the timeframes provided in the grievance mechanism, to the acknowledgement / satisfaction of both parties. In order to enable full verification of the effectiveness of the grievance mechanism, the IESC requires more detailed grievance records, rather than a high-level summary thereof.

With additional detail on grievances (including how these are considered in planning and management), the IESC may also establish whether opportunities exist for the Operator / contractors to, for example, incorporate additional trust-building mechanisms into existing processes. This may be achieved through mechanisms such as participatory environmental monitoring, and/or changes to monitoring locations / frequency, and /or verification of monitoring results by trusted community representatives, etc. Until such information is forthcoming, the IESC is unable to either assess the adequacy of grievance management with certainty or provide concrete recommendations and actions to address the issue(s). As such, this is raised as an Observation (continuation of existing Observation on grievance management) and may be escalated to a Minor Non-Conformance Level in subsequent monitoring exercises should verification remain impossible.

A related concern of the IESC is in regard to the previous monitoring period (April – October 2017), when the Operator reported no grievances for this monitoring period. The IESC followed this up at the Site Visit, where it was reported that the Operator also investigated the lack of grievances during this period and found that community concerns were able to be dealt with on the spot by the community liaison officers and that the concerns / issues were so minor in nature that they were not logged into the formal grievance system. The IESC notes despite the issues / concerns being minor in nature, these should still be recorded and formally reported in meeting minutes and engagement logs (if not through the formal grievance management system) and will request that verification thereof is provided at the next monitoring opportunity.

5. ENVIRONMENT

There are no non-compliances or observations noted in this Section.

5.1 Pollution Prevention and Resource Efficiency

5.1.1 Oil Spills and Protection

Environment spills during construction and operations are identified as a key risk due to the potential for discharge to the marine environment and soil contamination. The SD2 Project reports all spills outside of containment that exceed 1L in volume, with the data being reported in BP's project performance reporting, including to government authorities, and in the BP public Sustainability Reports. There were 2 reportable oil spills in the monitoring period. All spills were investigated by the Project team and corrective and preventative actions identified and implemented. In summary²⁵:

Table 3 Reportable Spills Summary

Incident Type	Site	Date	Description
Spill	SD2 Onshore	21/12/17	Two technicians observed leakage on Orifice Plate Flow meter line end plug of approximately 150l. Spill was contained, and spill kits were utilised.
Spill	Landfall Site	08/02/18	During a refilling operation of Baker Hughes temporary diesel storage tank, the tank was overfilled and approximately 900 litres was lost to the temporary bund area. During initial recovery the bund received minor damage resulting in approximately 30 litres of diesel spilling to the asphalt. Material was collected from the bunded area.

In the previous monitoring period, the IESC noted that follow up with the Operator at the next site visit would be conducted in relation oil spill corrective actions taken, deadlines, identification of responsible parties, and long-term preventative measures, among others. Further information to this end was provided during the site visit on the spill that occurred at the Landfall Site.²⁶ This included a summary of immediate actions taken subsequent to the spill, further actions taken, and a number of key learnings to share (see Section 3.4). The IESC notes that the spill resulted in updates to the relevant procedure, a safety stand down to review the incident and discuss incident investigation findings, updates to the communications flowchart, updates to the PTW and RA, among others.

The development drilling campaign being completed by the Istiglal and Heydar Aliyev MODUs have had no significant well control or spill incidents during the campaign to date. It was reported during the site visit that up to April 2018, 12 wells have been drilled and 8 completed. With regard to well control incidents, summary data provided to the IESC indicates that there were no Level 2 well control incidents on both the Istiglal and Maersk Explorer in 2017 and 2018 (to date). In 2017, (data does not indicate if this occurred during the current monitoring period), the Istiglal recorded two Level 3 well control incidents, while the Heydar Aliyev recorded two Level 3 well control incidents in 2018 (to date). No further information on the incidents was provided, and the IESC will seek to obtain further information on well control incidents reported, including a detailed

²⁵ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

²⁶ Diesel Spill at SD2 Terminal: Incident Summary.

description, corrective actions taken, deadlines, identification of responsible parties, and long-term preventative measures at the next monitoring exercise.

The SD2 drilling program has implemented the Operator's well integrity standards including Blow Out Prevention (BOP) valve testing during drilling and BOP inspection at surface on a regular frequency. The BOP inspection program includes certified inspection by an external third party. The IESC notes the extensive mandatory well control training provided to BP Operational and contractors involved in SD2 drilling.

During this monitoring exercise, the IESC reviewed 2 oil spill response exercise reports provided as evidence, and notes a comprehensive process remains in place including clear delineation of roles and responsibilities, procedures, communication, training, and incorporation of lessons learned. Adequate resources are available for oil spill response, evidenced in the reports sighted (in addition to the drill reports provided previous monitoring exercises).²⁷

It is noted that in 2015, the Operator worked with the Ministry of Emergency Situations on BP oil spill desktop and field drills, as well as BP participation in a major emergency response exercise organized by the Ministry. The IESC recommends that similar multi-party exercises are again conducted to ensure effective emergency response provisions are in place in the operations phase of the Project (and the corresponding organisational and personnel changes). The IESC will follow up on this at the next site visit.

5.1.2 Waste Management

The construction phase Waste Management and Minimisation Plan (10/1/14) has been superseded by the operations phase Plan, consistent with the commitments as specified in the ESIA. The plan aligns with BP's AGT Region Waste Manual. This includes key responsibilities and accountability; waste forecasting requirements; segregation; application of the waste management hierarchy; organisational structure; training; monitoring and reporting. Waste records include the requirement to use BP's waste transfer tracking system for all Project activities.

A full inventory of the hazardous materials and wastes used and generated by the Project during the construction and operational phases for onshore and offshore activities are included in the ESIA Chapter 5 Project Description. Predicted volumes and waste streams for hazardous materials are provided. Hazardous waste streams have been identified for the Project based on existing BP AGT region operations. The construction phase SD2 Pollution Prevention MP has been developed for all Project delivery teams and includes requirements for hazardous material management and chemical selection to ensure that ESIA commitments are complied with.

The IESC reviewed an SD2 Environmental Awareness Session presentation, which aimed to provide project employees with an overview of environmental activities in SD2. The focus of this training was on waste, including the legal framework thereof, hazardous materials management, and specific arrangement for waste management and pollution prevention at the ATA Yard. The IESC notes that the awareness training materials are comprehensive, and appropriate.

5.1.3 Air

Key GHG emission reduction considerations in design included flare reduction measures; offshore gas compression preferred above onshore compression; offshore flaring chosen over

²⁷Equipment Exercise at Briggs Base 07.02.2018 Canflex Sea Slug FCB-50CM; and Shoreline OSR Exercise at CSS-08 12.04.2018.

offshore venting; direct drive gas turbines onshore selected in preference to electric drives; and, waste heat recovery on onshore compression gas turbines. The SD2 Project is required to report GHG emissions annually during construction and operations in line with current reporting for the SD and AGC project reports and in accordance with the BP AGT Region HSSE Policies. The SD2 Project has committed to the implementation of GHG monitoring, management and reporting consistent with the procedures already in use on existing ACG Platforms. The publicly available annual report, *BP Azerbaijan Sustainability Report 2016* (2017 not available at the time of writing), includes the GHG emission data for BP's Caspian offshore operations and the ST..

The Operator reports²⁸ that stack emission sampling ports have been provided on all SD2 combustion equipment, both onshore and offshore, to enable annual stack emission monitoring during operations. Initial emissions testing will be undertaken following introduction of hydrocarbons in early 2018. Vendor testing will be carried out using an analyser during the initial run of the machinery to confirm the emissions are as per manufacturers' specifications. The IESC notes that as part of the current phase of commissioning activities at ST, both the Tank Flare and LP Flares are established, and therefore introduction of fuel gas to flares has commenced. During the next phase of commissioning, blow down testing of flares will be completed using dry gas. Following this initial testing, stack emissions monitoring will be undertaken as part of the Regional environmental team's programme. The IESC will look further at those monitoring programmes at this stage.

Resource efficiency measures adopted for flaring for onshore and offshore facilities is consistent with the Global Gas Flaring and Venting Reduction Voluntary Standard (part of the World Bank Group's Global Gas Flaring Reduction Public Private Partnership program) and the World Bank Group's sector-specific EHS Guidelines. Onshore Flare Gas Recovery (FGR) will be used on both the high pressure and low-pressure flare systems to minimise hydrocarbon flows to flare stacks under normal operations. There will be no continuous flaring or venting under normal operations. Flare combustion efficiency will be optimised to achieve 98% efficiency, in line with GIIP. FGR was not chosen for offshore facilities due to safe design constraints on the SDB platform.

5.1.4 Noise and Vibration

Baseline noise at all four nearby communities, Azim Kend, Sangachal, Umid and Massiv 3, was completed and reported in the ESIA. Monitoring during construction and the baseline surveys show regular noise levels at nearby communities above the daytime criteria of 65 dB (LAeq). The cause of exceeding noise levels has been attributed to a range of contributing sources including highway traffic, power stations, existing ST operational noise and trains. The Sangachal village noise monitoring presented the highest noise levels recorded over the construction period, as this site is located closest to the Baku-Salyan Highway and the Sangachal Power Station.

Construction Phase Monitoring of the Project has included attended noise monitoring undertaken pre-construction and then every two months during peak construction. Noise levels were recorded, along with observed noise sources e.g. local traffic. The action trigger occurs when criteria are exceeded on three sequential occasions during the same monitoring round due to SD2 related activities. 22 day and 6 night time survey rounds were completed between October 2014 and September 2017, with the monitoring results indicating:

- Daytime noise monitoring results:

²⁸ SD2 Lenders' Requests and Responses, November 2017.

- A number of individual noise levels above the daytime criteria of 65dB were recorded.
- These were attributed to sources such as car horns and vehicles on the highway and passing trains.
- There have been no instances where the action trigger has been reached due to SD2 construction activities.
- Night time noise monitoring results:
 - Noise levels recorded were typically above the night time criteria of 45 dB, however there have been no instances where the action trigger has been reached due to SD2 construction activities.
 - Noise from the SD2 construction activities was generally not audible at monitoring locations during the surveys.

Commissioning Phase Noise Monitoring has included attended noise monitoring undertaken during dewatering and drying/purging of the four SD2 subsea pipelines. This has involved the use of diesel and nitrogen generators, compressors, air dryers and pumps. The same approach and criteria were adopted as for construction noise monitoring. The survey rounds to date, include:

- Nov 17 - MEG Pipeline: 4 day time and 1 night time rounds;
- Jan 18 - Gas Export Pipeline 1: 6 day time and 2 night time rounds;
- Mar 18 - GEP 2: 6 day time and 2 night time rounds;
- Condensate Pipeline currently scheduled for dewatering and drying May 2018.

The monitoring results indicate:

- Commissioning Phase Day Time Monitoring:
 - No instances of noise levels above the daytime criteria of 65dB during the MEG Pipeline and GEP 1 surveys.
 - 3 instances (out of 60) of noise levels above the daytime criteria of 65dB during GEP 2 survey, however none of these exceedances were caused by SD2 commissioning activities.
 - There have been no instances where the action trigger has been reached due to SD2 commissioning activities.
- Commissioning Phase Night Time Monitoring:
 - Noise levels recorded during the MEG survey were generally below the night time criteria.
 - There were no instances where the action trigger was reached due to SD2 commissioning activities.
 - Noise levels recorded during GEP 1 & 2 surveys were typically above the night time criteria (between 1-11 dB above).
 - There have been instances where the action trigger has been reached due to SD2 commissioning activities, including during:

- GEP 1 survey: at Umid (x4) and Sangachal (x1).
- GEP 2 survey: at Masiv 3 (x1), Azim Kend (x1) and Sangachal (x1).

For dewatering and drying/purging activities, mitigation measures were taken, where possible. These included slowing the process down in order to decrease noise levels. Communities were notified of the planned activities and the potential noise levels (see Section 4.5). Community notification and engagement will continue for the final condensate pipeline commissioning activities which are expected to last 8 days (Operator indicated this would be occurring within a few weeks of the Site Visit).²⁹ No community grievances were reported in the monitoring period on the topic of increased noise levels (there have been no noise related complaints since 2015). The Operator also plans to conduct community engagement to communicate the results after the programme has ended.

The Operator note the when the SD2 gas starts coming in as part of the Start-Up Phase, planned flaring will need to be conducted with this gas (several days). Any other flaring will be an unplanned event. In relation to (planned) flaring activities, communities will be provided 2 weeks' notice of these events.

5.1.5 Water

Produced Formation Water (PFW) from the SD2 operations has been subject to further investigation to ensure sufficient capacity, including contingency, for suitable disposal of the waste water produced during the processing of SD2 gas. The base case for PFW disposal for SD2 is to use the SD1 process water management system and to dispose of treated water through re-injection offshore to the AGC well field using existing infrastructure. The current PFW system at ST has capacity of 75,000 bls/day and is expected to substantially exceed the required volumes of both SD1 and SD2 PFW disposal requirements. However, the Operator is continuing to evaluate alternative PFW management options should the volumes of PFW exceed estimates or in the case that the re-injection at AGC is no longer available³⁰. It was noted by the Operator during the Site Visit that current information suggests that the risk of not having sufficient capacity for PFW disposal is reduced.

With respect to hydrotest discharges to the environment that have occurred during the monitoring period, the Operator noted that a total of 2,593m³ discharge for hydrotesting was approved in ESIA, and that actual hydrotest volumes of discharge remain below this.

5.2 Biodiversity Conservation and Ecological Management

5.2.1 Protection and Conservation of Biodiversity

The SD2 Project construction at ST includes the pipelines from the beach crossing to the terminal which pass a coastal zone which includes wetlands (or wadi) located to the east of the SD2 expansion area. The works in this area are complete and no further land disturbance is expected. There have been no reported incidents of impacts to wildlife or conservation values for the terrestrial or marine environments due to the construction / commissioning operations at SD2 for the monitoring period.

Pre-existing soil and water contamination was identified and reported in the initial ESIA baseline studies prior to civil works commencing for SD2, which identified possible sources of contamination from nearby pipelines and neighbouring land use. There was evidence of pre-

²⁹ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

³⁰ *Ibid.*

existing free phase oil on water located in wetlands near to the neighbouring power station. The SD2 project maintains a monitoring programme to identify the cause of contamination at the wetlands area and monitor the ecological use of these wetlands by birds and other fauna. The results of ecological monitoring are reported annually to the Ministry for Environment.

With regard to reinstatement, a portion of the laydown area used during the Construction Phase is planned to be used for a while longer, with the Operator indicating that they are currently assessing options for the transfer of some of the equipment stored in the laydown area, with the areas need to remain transferred over to the Operations team to manage. To this end, a Management of Change process was instituted, and a letter submitted to and approved by MNER to keep the delineated temporary facilities in place. Similarly, the SD2 temporary security facilities (access gates) area that had been planned for reinstatement was identified as still required. This was also subject to the same process and approved with the requirement to submit a close-out report once the Project is complete. The final commitment will be to reinstate these areas eventually.

The existing environmental monitoring locations all remain in place, and these will continue to be maintained through Operations. Environmental monitoring obligations have been handed over to the Operations team and are now included as part of the Operational Phase environmental monitoring programme.

6. SOCIAL

Compliance summary:

- No new findings were recorded during this monitoring period.

6.1 Labour Working Conditions

6.1.1 'Worker and Sub-Contractor Management

The status of Project employment as of the end of April 2018 is provided in Table 4. The employment numbers peaked for the construction phase (in August 2016) and de-manning commenced in the third quarter of 2016 at Project sites in response to completed work packages. Between the last monitoring site visit conducted (October 2017) and this monitoring period (November 2017 - April 2018), employment numbers dropped from 7,606 to 5,921³¹. The Project continues to implement a de-manning strategy aimed at minimising the impacts of reduced employment. Workers are provided minimum of 1-month notice prior to redundancy taking affect. A completion payment is provided at the end of employment for workers who have been engaged for a minimum of 12 months. The completion payment exceeds the requirements of local labour laws and is made under Project employment conditions.

During the Site Visit, the Operator reports that the key focus continues on demobilising the SD2 Project workforce with no issues. The contractors are managing the Project workforce demobilisation through a "consistent and fair approach to employees in strict compliance with applicable local legislation"³². Furthermore, during demobilisation of local community members it was noted that the contractors followed plans and procedures designed to ensure a fair and transparent termination process according to social and legal requirements. Contractors are issuing appreciation certificates to highly performing personnel on termination (demobilisation). The Operator reported that there were approximately 1,500 locals employed during construction, with 80 now employed on operations in the refinery, and 70 others employed at the local industrial park. It was noted anecdotally that the demobilised SD2 contract workforce are highly regarded and sought after on other projects based on their experience on SD2. An example provided included workers from the Azfen workforce moving onto a SOCAR project.

Other aspects of the de-manning strategy include ensuring the timing of redundancies avoids periods when large numbers of workers are released at any one time and maximising the potential for contract labour to move between work packages and contracts when the skills are requirements allow. During the Site Visit, the BP Social Investment Team presented an overview of their activities in the communities surrounding SD2, a key focus of which is to increase the opportunities for broader income generation and employment (see Section 4.6 for further discussion). The IESC again notes the opportunity to link current and future community development initiatives more explicitly with the de-manning / demobilisation process, which may result in increased unemployment in neighbouring communities, influx issues, fewer supply chain / enterprise development opportunities, and a potential increase in social nuisance issues. The opportunity to do so is supported by the actual grievances reported during the monitoring period, including concerns raised by communities on project demobilisation and the lack of employment opportunities³³. The IESC understands that the Operator and its contractors are addressing concerns about project demobilisations and a lack of forward employment opportunities by

³¹ BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

³² *Ibid.*

³³ SD2 Grievance Summary.

communicating the nature of the project and providing any information available on new job opportunities on other contractor projects where appropriate. There remains an opportunity to communicate specific information on relevant community investment /development projects that may benefit members of the demobilised workforce through skills diversification (computer literacy, SME development programs, etc.). It is noted that in the community meeting attended by the IESC that community members appeared to have a high level of knowledge and support for the community programs implemented by BP, including support for training on funding applications, computer skills and language training.

Meetings with local communities are reported to include discussion of changes to contract labour requirements during the Project construction period (see Section 4.5). The de-manning program is also discussed with SOCAR and Labour unions. Labour Management Forums are in place to discuss and resolve key HR/IR issues relevant to contracts and BP personnel working on the SD2 construction. The Labour Management Forum Dashboard includes covering the following topics: Workforce Communication and Engagement; Terms and Conditions; Disciplinary Action / Disruption / Absenteeism; Training and Competency Enhancement; Community Engagement / Relationship Management; External Engagement (Government / Non-Governmental / Media); and Demobilisation. The IESC was not able to review minutes from the Labour Management Fora for this monitoring exercise.

Table 4 Manpower Status (April 2018)

SD2 Key Contractors Manpower Status		
Offshore Facilities		
Job Category	Nationals	Expats
ATA (Decks)		
Professional	438	47
Non-Professional	209	0
Total	647	47
Grand Total: 694		
BOS Shelf (Jackets)		
Professional	1,512	488
Non-Professional	660	0
Total	2,172	488
Grand Total: 2,660		
Marine and Subsea		
Saipem (M&S)		
Professional	295	190
Non-Professional	45	0
Total	340	190
Grand Total: 575		
Baku Shipyard and Keppel		
Professional	0	0
Non-Professional	0	0
Total	0	0
Grand Total: 0		
Bredero Shaw (CPC)		
Professional	0	0
Non-Professional	0	0
Total	0	0
Grand Total: 0		
Onshore Facilities		
TKAZ (Terminal)		
Professional	1,115	63
Non-Professional	441	0

Total	1,556	63
Grand Total: 1,619		
SWIFT MS		
Professional	159	187
Non-Professional	27	0
Total	186	187
Grand Total: 373		
TOTAL MANPOWER: 5,921		

6.1.2 Worker Accommodation

The IESC had the opportunity to visit the accommodation platform topside at the site visit in April 2017, which was nearly complete and commissioning for which was underway. The sail away occurred in June of 2017. The IESC notes that the facilities are appropriate and exceed the requirements of good international industry practice.³⁴

6.1.3 Worker Grievances

The ESIA describes grievance handling and the site audit confirmed it is in place and being implemented. The Employee Relations MP also requires that a grievance process be implemented for contractors. The Employee Relationship MP required of each contractor also includes a grievance mechanism.

The Labour Management Forum reviews worker grievances such that there is BP oversight of grievances that are being managed by individual contractors. According to the Operator, a review of grievances raised by the workforce and communities to construction contractors during the Monthly Labour Management Forums indicates that the vast majority of these are around demobilisation and lack of employment, however additional concerns raised during the monitoring period are summarized below. The IESC was not provided further detail on grievances reported during the monitoring period, such as total number thereof, number resolved / outstanding, etc. Furthermore, the IESC notes that whilst the responses described below evidence the Operator / Contractor response to the grievance raised, the IESC is unable to adequately verify whether these grievances were resolved to the satisfaction of both parties involved. The IESC will seek additional information on grievance resolution at the next monitoring opportunity, including evidence to demonstrate grievances are being resolved to the mutual satisfaction and / or acknowledgement of both parties, that, where applicable, the Operator / Contractor are addressing grievances materially through consideration in planning and operations, and that grievance resolution is effectively communicated to the aggrieved part(y). See Section 4.6 for further discussion on grievance management.

Table 5 Labour Management Forum Grievances and BP/Contractor Responses

Concern Raised	Response
Project is demobilizing workforce and lack of employment opportunities	Construction contractor responds to workforce/communities on nature of the project and provides information on any new job opportunities on other contractor projects where appropriate
PPE sizes are bigger and do not fit smaller sizes	Construction Contractor rectified issue and closed out action
Employees have concerns with urban free-ranging dogs around the camp canteen	Contract was signed with a related company who is in charge of regular checks and actions at site.

³⁴ IFC Guidance Note "Workers' accommodation: processes and standards", 2009.

There have been no significant labour or community disputes as a result of de-manning so far, which is indicative that the process in place is being managed effectively. However, IESC notes that the potential for an increase in grievances during the de-manning process remains high, given the fewer future employment opportunities for particular skillsets. This will again be followed up during the next site visit.

6.1.4 Procurement and Supply Chain

BP contractors and their employees are required to act consistently with the Company's code of conduct and human rights policy. The standard model contracts that BP procurement teams use when agreeing new contracts include requirements for suppliers to respect internationally recognized human rights in their work for BP, with a specific prohibition on the use of forced or trafficked labour. Working with industry peers, BP have developed a human rights due diligence process that can be used to screen suppliers in a consistent way anywhere in the world. This process was piloted with potential suppliers in 2016 and the Company are now reportedly³⁵ using it with suppliers on a risk-prioritised basis to understand how they manage these risks in their business and supply chain.

A specific example of the Company's approach to labour rights in procurement and the supply chain is taken from the *BP Sustainability Report 2017* in relation to the South Caucasus Pipeline Expansion project (SCPx, which is a SD2 associated facility). SCPx will transport gas from Azerbaijan to markets in Europe. In Georgia, around 5,000 people helped to construct three facilities and a pipeline, with around 10% of the workforce originating from other countries such as India and Thailand. BP assessed the labour rights practices of their construction contractors and certain sub-contractors and found no instances of forced labour, but did identify some labour rights concerns, such as not having documents in the workers' native languages. According to BP, the assessment reinforced the importance of:

- Clear contract clauses on employee relations and labour rights;
- A monthly on-site labour management forum so that workers can share concerns or ask questions
- Regular reviews of employee terms and conditions, welfare and grievances by experienced employee relations professionals within the contractor organisations.

It is also noted that BP procurement is largely from Azerbaijan by Azeri workers, which has facilitated close oversight of procurement and the supply chain and minimised the risks of child and forced labour. Further, IESC observes that procurement and supply chain risks will be somewhat reduced with the move from construction to operations and the corresponding decrease in the number of workers / contractors in the supply chain.

6.2 Land Acquisition, Resettlement, and Livelihoods Restoration

6.2.1 Land Access Agreements

Although the midstream gas pipeline expansion project for the SCPX is not core to the scope of this review (as it is an associated facility), it is noted that significant land acquisition and compensation has been progressed and reported in the *BP Azerbaijan 2016 Sustainability Report*. Following execution of land lease agreements across the SCPx right-of-way (ROW) in Azerbaijan, BP completed compensation payments to 2,921 private land owners/users and 65

³⁵ *BP Sustainability Report 2017*. www.bp.com.

municipalities. In addition, there were a number of factual user agreements executed and compensations made. The compensation process and principles have been conducted in line with BPs guide to land acquisition and compensation framework, which is generally aligned with IFC Performance Standards and guidance. No involuntary resettlement has taken place as part of the SCPx project.

6.2.2 Fishing Livelihoods

The ESIA process identified that local commercial fishing in the Sangachal area would be subjected to economic displacement during the period of enforcement of a marine exclusion zone around the gas export pipeline shore crossing. The Marine Exclusion Zone was a temporary measure during which all vessels would be excluded from entering a formally enforced zone. The Project had developed a Fishing Livelihoods Management Plan (FLMP) in 2015 as a framework for identification of impacted fishermen, determination of compensation; established a mechanism for engagement and a grievance process. The SD2 Project FLMP states the commitment to “ensure that the livelihoods and living standards of small-scale fishing households affected by SD2 activities are restored to, or where possible, improved above pre-Project conditions” (FLMP 2015). The FLMP has been continually reviewed in response to feedback and in response to project changes. For example, the initial compensation arrangements were put in place for 43 fishermen deemed eligible under the FLMP framework. However, the 1st Household Monitoring Survey undertaken in June 2015 resulted in reconsideration of eligibility and a further 5 fishermen were included in the compensation arrangements (as reported in the IESC July 2015 Report).

Since July 2015, an independent consultant (AECOM) has completed quarterly monitoring of the 48 eligible fishermen. The surveys have indicated that 100% of fishermen considered their crew had more fishing assets after the FLMP implementation was complete. 92% of fishermen considered BP communication on SD2 Project and FLMP implementation had been effective. 100% of respondents (48 fishermen) continue to fish in Sangachal Bay. 43 of 48 fishermen reported either an improvement or no change in household living standards.

5 fishermen reported deterioration in household living standards. A Close Out Survey was conducted with these fishermen. They reported that the process for compensation has been transparent and implemented well. No clear evidence was provided as to why livelihoods were impacted for a small minority of fishermen when the rest of the members of their crew reported no deterioration in living standards.

As discussed in the last Monitoring Report (May 2017 – October 2017), the FLMP completion audit was completed in Q3 of 2017. Conclusions from the completion audit included:

- The implementation process, including methods and tools used to determine eligibility and entitlement and to record compensation payments adhered to the process that was set out within the FLMP;
- Adaptations to the implementation process were effective in responding to: feedback on increased eligibility, to findings from livelihood monitoring, and to the increased duration of the MEZ.
- Fishermen were kept engaged throughout the design and implementation of the FLMP, with positive feedback received from them on the effectiveness of this communication;

- Monitoring showed that for the vast majority, households' livelihoods either improved or remained the same since commencement of SD2 construction activities.

The Operator notes that the next steps will include:

- Ongoing engagement will be used to provide reminders that the MEZ is no longer in place, and to give an update on Project activities.
- Further impacts to fishermen are not anticipated.
- Grievance Mechanism continues to be available to fishermen in relation to past or any perceived ongoing impacts of the Project on fishing livelihoods.

The IESC was able to engage directly with affected fishermen during the monitoring visit at the community meeting (see Section 4.5). These representatives corroborated the above described provisions, including ongoing implementation (and understanding) of the grievance process and its accessibility. Fishermen expressed gratitude for BP's assistance in compensating for lost income and for the relocation of fishing camps due to the impacts from the SD2 construction activities. The fishermen present in the meeting voiced that communications between the company and fishermen was very good and the company addressed issues/concerns quickly. It was mentioned by one representative that in his experience local fishing livelihoods had not improved after the compensation packages had been completed and many fishermen have to travel further due to reduced fish stocks. Fishermen stated that there is a lack of fishing regulation/management and that this impacts commercial viability of the industry. However, the fishermen were grateful for the support provided by BP.

7. HEALTH AND SAFETY

Compliance summary:

- One observation remains open in relation to Project's potential for influx issues, which was scoped out at the time the ESIA was prepared. The IESC has expressed concern in previous monitoring reports that there is no system in place for monitoring potential influx during this period of de-manning, particularly as the economic environment in Azerbaijan into which this workforce is being laid off will be more challenging in finding future work opportunities. The IESC was able to discuss community concerns and issues directly with community representatives during the site visit. Communities noted that many "local" employees on the SD2 Project are not actually from local villages. In the current phase of demobilisation on the Project and fewer employment opportunities, this issue may be exacerbated at the local level should non-locals or perceived non-locals be provided with employment opportunities. The IESC will seek additional verification at the next monitoring opportunity as to the protocols employed by the Operator and its contractors to assess and establish employment applicants' "local" status.

7.1 Worker Health and Safety

The SD2 construction project had maintained an excellent safety record, consistent with the requirements of GIIP delineated by ADB and IFC performance standards and guidelines³⁶, for the period from commencement of construction to the monitoring exercise in April 2018. The Project had amassed approximately 130 million man-hours worked, and achieved an overall rolling 12-month Recordable Injury Frequency Rate (RIF) of 0.08³⁷. As a comparison, the relevant industry standards for RIF established by the International Association of Oil and Gas Producers (IOGP) is 0.56 and International Pipeline and Offshore Contractors Association (IPLOCA) is 0.24 (IOGP and IPLOCA data have been normalised to 200,00 as per BP practice). There have been no fatalities on the Project to date; and between November 2017 and April 2018, there were no high potential incidents, or recordable injuries.³⁸ Drilling HSE statistics are reported separately (see below).

In an effort to validate the Operator's reporting systems and check that the extremely low number of reported incidents, etc. is not due to a lack of reporting, the IESC questioned the Operator about the reporting, questioning whether the Operator tracks hazard reporting for the purpose of indicators. The Operator responded to state that hazard reporting is intrinsic within their system, but that it is not specifically reported on. Hazard reporting is tied to self-verification, and qualitative assessment of risk which generate insights that allow personnel to intervene before the risk event takes place. These insights are then tracked. The Operator also pointed to their system for reporting and tracking of near misses, as well as unsafe acts and unsafe conditions. These are tracked and reported, and each is assessed by the relevant team and appropriate actions / conversations held with the relevant sites / personnel. Further, in the case of unsafe conditions, the Operator has a policy of "stand down, and stand up" (which reflects the Operator's emphasis on positive reinforcement).

³⁶ Including the World Bank Group Environmental, Health, and Safety Guidelines for Offshore Oil and Gas Development; and the General EHS Guidelines.

³⁷BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

³⁸ *Ibid.*

The IESC was also interested in understanding whether there is a balance between the HSE Schedule and contractual requirements, to which the Operator indicated that they will not compromise on safety based on the cost and schedule (i.e. driving contractors to be ahead of schedule). The Operator reported that they tend to focus on driving Contractor's HSE performance through the correct interventions for each contractor and working with that contractor to better their performance. The Operator has not experienced any instances where they have had to terminate a contract based on poor HSE performance, which it attributes to working intimately with their contractors and knowing their strengths and weaknesses so that they can tailor their scope of work to account for any gaps and maximise contractor strengths.

The IESC again focused specifically on the offshore drilling HSE performance for this monitoring exercise. There are currently 2 drilling rigs operating. Drilling will be ongoing until 2024, drilling deep water / high pressure areas. This is one of the IESC's focus areas due to the environmental and safety risks. The Operator reports that current production parameters are higher than expected (North Flank). The drilling of 12 wells has been completed and 8 of these have been tested. With regard to incident statistics, the following performance is noted in relation to drilling:

Table 6 Drilling HSE Performance

	Istiglal		Heydar Aliyev	
Incident Statistics	2017	YTD 2018	2017	YTD 2018
MIA	0	0	0	0
HIPO	0	1	0	1
Fire / Explosions	0	1	1	0
Well Control incidents (Level 2)	0	0	0	0
Well Control incidents (Level 3)	2	0	0	2
Total Near Misses	14	4	12	1
Dropped Objects actual	1	0	4	0
Equipment/Property	6	3	4	2
Personal Safety	2017	YTD 2018	2017	YTD 2018
RIF	0.3	0	0.35	0
Recordable Injuries	1	0	1	0

As evidenced, the data shows that performance is consistent with the statistics reported for the rest of Project, with a low now number of incidents reported. The RIF for 2017 (0.3 for Istiglal and 0.35 for the Heydar Aliyev) is higher than that reported for the rest of the Project (0.08), although still within the IOGP parameters (0.56), but higher than that of the IPLOCA parameters (0.24). The IESC will continue to monitor drilling HSE performance closely in subsequent monitoring exercises.

BOP testing is completed every 5 years, as per the schedule. There are global contracts in place with 2 well control providers that can mobilise to site immediately to provide assistance. Further, BP requires all employees to attend well control training every 2 years. It is also noted that drilling contractors are requiring their employees to attend well control training on the off-year (i.e. employees are attending well control training every year).

The IESC has, at previous site visits and on this site visit, observed a strong safety culture at all sites and an established relationship between BP and the contractors. This includes the use of PPE, dual language safety signs, barriers to prevent access to unsafe areas, permits to work, safety inductions for visitors and the availability of medical treatment and emergency response facilities/capability onsite. This strong safety culture is exemplified by the ongoing excellent safety

statistics for this monitoring period (November 2017 – April 2018). The IESC commends the Operator and its contractors on successfully navigating the transition to a hydrocarbon live status at the ST, with no major HSE issues recorded.

116 million km had been driven for the Project to date without a serious project-related traffic accident³⁹. Traffic use on the Baku-Salyan Highway poses significant risk to Project workers as this is the main route taken for workers who commute daily to the offshore construction facility yards and the onshore construction site at ST. Traffic management to reduce risk includes the use of busses for workers and strict enforcement of Project defined speed limits.

Key HSE focus areas, as evidenced in the Project Monthly Reports include continuation of the “Finish Strong Campaign,” waste management campaign conducted at the Marine Base, SD2 Environmental Awareness Sessions; HSE communications; and various behavioural safety campaigns, including, “Stop the Job”, “Prepare for Winter,” “Keep Your Hands Safe”, among others⁴⁰.

Safety observations are formalised through a behavioural observation safety program that requires workers to document safe work observations undertaken during normal work activities. Specialist contractor HSE personnel support the program.

The offshore construction process includes a change register for any changes that occur to the original design which had been subjected to a comprehensive risk assessment. The change register provides a record of variation in design and any additional risk management controls that may be required

7.2 Community Health, Safety, and Security

In relation to community safety, BP reported in the site visit meetings that, where appropriate, local communities are involved in scenario planning for emergency response. BP also advised that drills involve internal and external communications with various community members through the existing community engagement process (contractor and BP-led processes). It is not clear to the IESC (from the records reviewed of community meetings, and from the feedback received during the community meeting attended by the IESC) whether communities are subject to debriefing / awareness processes in relation to emergency response drills / plans. The IESC will seek further verification of the emergency response measures in place, particularly those related to community communications / awareness and involvement as the project moves into the Operations Phase, at the next monitoring exercise. The IESC recommends the Operator include specific advice in its upcoming community meetings on emergency response protocols for the Operational Phase of the Project.

Noise monitoring is undertaken at SD2 onshore construction site at the nearby communities to ST to verify compliance with agreed noise criteria and determine if Project construction activities are significantly contributing to breach of noise criteria. The Project specified noise criteria have been derived from British Standard, BS5228-1:2009. An action trigger occurs when criteria are exceeded on three sequential occasions during the same monitoring round due to Project activities. As discussed in Section 5.1.4 data is presented for the noise monitoring at nearby communities during community meetings. BP advised that there have been no noise complaints received from communities through the formal grievance process since construction works commenced on SD2.

³⁹BP, *SD2 Partner and Lender Visit Presentation*, April 2018.

⁴⁰Project Monthly Reports provided for monitoring period (November 2017 – April 2018).

The IESC was able to follow up a concern in relation to the Project's potential for influx issues, which was scoped out at the time the ESIA was prepared on the grounds that the accommodation camp is a closed one. The IESC has expressed concern in previous monitoring reports that there is no system in place for monitoring potential influx (e.g. coordination with local government agencies or other organisations) during this period of de-manning, particularly as the economic environment in Azerbaijan into which this workforce is being laid off will be more challenging in finding future work opportunities. BP have previously noted that there have so far, been no community-reported grievances in relation to influx, or any other nuisance issues related to the de-manning that has already occurred. The IESC was able to confirm with the Operator that no influx-related nuisance issues were reported by communities through the grievance mechanism during this monitoring period.

Furthermore, the IESC was able to discuss key community concerns and issues directly with community representatives during the site visit. Communities noted that labour issues are frequently discussed with communities, although it was noted that there remain high levels of youth unemployment and few opportunities for local workers. BP responded during the meeting by reiterating the extent of local employment (1,500 people during construction, with 80 employed on operations in the refinery, and 70 others now employed at the local industrial park) from construction and operations. However, these figures are questioned by community members, who claim that many "local" employees are not actually from local villages. Establishing whether people can be classified as local for employment purposes is notoriously difficult on projects such as this, and this was acknowledged by both BP and the community representatives at the meeting. In the current phase of demobilisation on the Project and fewer employment opportunities, this issue may be exacerbated at the local level should non-locals or perceived non-locals be provided with employment opportunities. The IESC will seek additional verification at the next monitoring opportunity as to the protocols employed by the Operator and its contractors to assess and establish employment applicants' "local" status.

The IESC will continue to monitor the potential for influx issues as a result of de-manning of the Project and seek to verify this through assessment of detailed grievance management records and through ongoing community consultation at site visits in the future.

An issue raised by community representatives at the community meeting attended by the IESC was in relation to health impacts on communities as a result of environmental pollution (air quality specifically). This issue is discussed in detail in Section 4.5 in relation to stakeholder engagement and not repeated in this section.

8. CULTURAL HERITAGE

8.1 Protection of Cultural Heritage

The SD2 construction at ST included provision of ongoing monitoring of potential impacts to Cultural Heritage and a watching brief for works being undertaken outside of past detailed heritage surveys. Monitoring was being undertaken by local experts in consultation with the Ministry for Culture and Tourism. The initial surveys were completed as part of the investigations undertaken for the Early Infrastructure Works (EIW) EIA prepared and submitted for approval to the Ministry of Environment. The EIW EIA included details of the Cultural Heritage Monitoring and Management Plan and the Chance Find Protocol to be implemented during construction. These surveys were originally completed in 2011 and identified the two most significant heritage sites being a nearby Caravanserai and Sand Cave site located nearby to the pipeline shore crossing. Both sites are protected under cultural heritage laws but have been considered to have low national significance. The Project's cultural heritage plan commits to maintaining a watching brief during earthworks to identify any potential cultural heritage aspects or finds during excavations and land disturbance. The majority of areas subject to the SD2 watching brief have been previously disturbed by earlier ground clearance and construction activities. The watching brief was completed in Q3 2017, with a Close-out Report completed in Q4 2017 and issued in Q1 2018. The watching brief was conducted over 123 weeks (718 person days on site). No archaeological sites or archaeological features were found during the SD2 watching brief. The majority of Isolated Finds identified are considered to be the result of rural seasonal activities and/or short-term economic activities during the Medieval Period. There were also a small number of XV-XVII Century finds. No permanent settlement or buried archaeological deposits were found.⁴¹ The IESC understands that no further work in this regard is anticipated.

Monitoring of vibration near the Sand Cave heritage site has been undertaken by the SD2 Project to protect the site from potential damage from Project related activities near the shore crossing and pipeline beach pull site where water winning ponds were constructed approximately 100m from the Sand Cave site. The vibration monitoring was designed to confirm if vibration from construction activities were below criteria that would have potential to damage the site, which is a State protected monument and considered fragile. Site specific criteria for vibration, including both continuous intermittent criteria, was developed by SD2 based on Codes of Practice, heritage protection advice and baseline vibration monitoring results and action triggers were developed. 11 rounds of vibration monitoring were completed at the Sand Cave during the pipeline landfall construction activities that included rock breaking, piling and pile removal. Monitoring results show that 89% of vibration levels (10 monitoring results) were recorded below the continuous criteria and 1 result was recorded above the intermittent criteria. The action trigger was not reached, but the Project did amend the piling technique to reduce vibration in response to the monitoring results. No damage to the Sand Cave site was observed throughout the works.

⁴¹ Responses to Lenders' Requests Slide Pack, November 2017, and BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

Appendix A Document List

Evidence List

File or Information Title	Contents
November 2017 – April 2018	
BP. SD2 Partner and Lender Visit Presentation. April 2018.	Response by BP to the formal document request submitted by the IESC in PPT format.
SD2 Partner Progress Report – March 2018	Progress report sent to all SD2 partners.
SD2 Partner Progress Report - January 2018	Progress report sent to all SD2 partners.
SD2 Partner Progress Report – December 2017	Progress report sent to all SD2 partners.
SD2 Partner Progress Report – November 2017	Progress report sent to all SD2 partners.
SD2 Partner Progress Report – October 2017	Progress report sent to all SD2 partners.
Equipment Exercise at Briggs Base 07.02.2018 Canflex Sea Slug FCB-50CM	Oil spill response exercise report.
Shoreline OSR Exercise at CSS-08 12.04.2018	Oil spill response exercise report.
Diesel Spill at SD2 Terminal: Incident Summary	Diesel Spill at SD2 Terminal: Incident Summary.
Istiglal & Maersk Explorer HSE Performance Report	Summary of HSE Performance for Drilling.
SD2 Environmental Awareness Session_PPT.	Environmental awareness training session.
SD2 Grievance Summary.	Summary of community and worker grievances.
BP Sustainability Report 2017	BP's Global Sustainability Report for 2017.
May 2017 – October 2017	
SD2 Lenders' Requests and Responses, November 2017.	IESC document request and Operator responses.
Responses to Lenders' Requests Slide Pack, November 2017.	Presentation slides detailing HSSE updates
Project Monthly Report, Shah Deniz 2 Project, May 2017.	
Project Monthly Report, Shah Deniz 2 Project, June 2017.	
Project Monthly Report, Shah Deniz 2 Project, July 2017.	
Project Monthly Report, Shah Deniz 2 Project, August 2017.	
Project Monthly Report, Shah Deniz 2 Project, September 2017.	
Oil Spill Response Training and Exercise Summary Report, Offshore OSR Nofi Current Buster 2 & Boom Vane 1.5m Deployment Exercise.	Emergency Drill Report
BP in Azerbaijan Sustainability Report. 2016.	Provides a range of information on business performance in Azerbaijan during 2016 (publicly available report).
Summary of Shah Deniz Stage 2 Environmental and Social Management, September 2017 https://www.bp.com/content/dam/bp-country/en_az/pdf/ESIAs/SD2-ESIA/SD2_Appendix_9_Eng.pdf	Publicly disclosed E&S Management Plans on the Operators website.
May 2016-April 2017	
Shah Deniz 2 Project Monthly Reports (May 2016 – February 2017)	Monthly Project Updates
Full Slidepack April 2017	SD2 HSSE update presentation to IESC by BP
SD2_Additional Documents Requested	Additional info requested by IESC and provided by BP, including Oil Spill Response activities, community engagement; grievance management, and fishing livelihoods management.
Tekfen-Azfen Alliance Spill Emergency Exercise, Sangachal Terminal. July 2016.	Spill response exercise report.
Saipem Offshore Construction Vessels Emergency Drill Report. May 2016.	Emergency Drill Report.

Briggs, Oil Spill Response Training and Exercise Summary Report. March 2016.	Oil Spill Response Drill. Report.
Briggs, Oil Spill Response Training and Exercise Summary Report. August 2016.	Oil Spill Response Drill Report.
SD2 Environmental and Social Management and Monitoring Plan.	Updated with commissioning and transition to operations aspects.
Istiglal and Maersk Explorer HSE Performance Report	Drilling rigs HSE performance report and data.
SOCAR EITC Statement. April 2016.	Extractive Industries Transparency Commission summary and links.
BP Global Sustainability Report. 2016.	Global business performance during 2015 (publicly available report).
IESC Visit to ATA Yard 06042017.	Offshore delivery progress and activities at ATA Year, HSE performance; project progress.
IESC Visit to Sangachal Terminal 06042017.	ST development progress; activities at ST; HSE performance.
BP in Azerbaijan Sustainability Report. 2015.	Provides a range of information on business performance in Azerbaijan during 2015 (publicly available report).
IESC Interview with BP at Baku Headquarters, 05042017.	