



MONITORING REPORT

Bank of China (Inter-Creditor Agent)

Independent Environmental & Social
Consultant Monitoring Report for the Shah
Deniz 2 Project (May 2019 – December 2019)

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Abbreviations

ADB	Asian Development Bank
AGT	Azerbaijan-Georgia-Turkey
ATA	Amec-Tekfen-Azfen
bcma	billion cubic meters per annum
BDJF	Baku Deepwater Jacket Factory
BOP	Blow Out Preventer
BSTDB	Black Sea Trade and Development Bank
BTC	Baku-Tbilisi-Ceyhan
CHSS	Community, Health, Safety, and Security
CTM	Compliance Task Manager
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
FRL	Fluid Return Line
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
IMPP	Injection Moulded Polypropylene Machine
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
NPT	Non-Productive Time
OHS	Occupational, Health and Safety
OMS	Operating Management System
PIC	Project Information Centre
PLBH	Pipe Lay Barge Huseynov
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	South 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
SMP	Social Management Plan
SOCAR	State Oil Company of the Azerbaijan Republic
SOP	Standard Operating Procedure
SPS	Safeguard Policy Statement
SPS	Subsea Production System
ST	Sangachal Terminal
STSLMP	Sangachal Terminal Stakeholder Liaison Management Plan
Sustainability	Sustainability Pty Ltd
TAP	Trans Adriatic Pipeline
TANAP	Trans Anatolian Pipeline
TKAZ	Tekfen Azfen Alliance (construction contractor)
TSP	Total Suspended Particle

Executive Summary

Sustainability Pty Ltd (Sustainability) is the Lenders' Independent Environmental and Social Consultant (IESC) appointed by the Bank of China, acting as Inter-Creditor Agent (ICA) for the Lender group financing Lukoil Overseas Shah Deniz Ltd (LOSD). This report details the IESC's findings for the desk-based monitoring exercise for the period May 2019 – December 2019.

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 (BP).

A summary of the key monitoring findings for the period is provided below. Findings 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).¹

¹ See Section 2 for detailed definitions of non-conformance.

Environmental and Social Management Capacity

- **1 Observation regarding the operational ESMS documentation.** IESC noted in 2019 that the AGT Waste Manual, and the EMS Manual did not reflect SD2 within their scope. Further, the ST Stakeholder Liaison Management Plan, and a number of other operational ESMS documents did not reflect that a review was conducted prior / during the incorporation of SD2 within the operational ESMS. The IESC observes that the two documents provided in January 2020 for review (STSLMP and the AGT Region Waste Manual) have been updated. Further, BP reports it is currently working on updating the Environmental Management System documentation and will be able to share updated documents in the next monitoring cycle. This observation therefore remains open, subject to the recommendations being implemented and evidence thereof provided.

Social

- **A Level 1 Non-Conformance (Low) is opened relating to the requirement for public disclosure** to neighbouring communities of the operations phase environmental and social management plans. The IESC understands that disclosure has not occurred yet, though BP has indicated that operations phase environmental and social management plans are now intended for publication during the course of 2020. The IESC strongly recommends that disclosure occurs as soon as practicable in 2020. This finding is raised to a Minor Non-Conformance Level, until such time as effective disclosure is demonstrated.
- **A Level 1 Non-Conformance (Low) is Closed in relation to a lack of consistent and systematic documentation of engagement activities by BP.** The Minor Non-Conformance in this regard is now considered closed by the IESC. The evidence provided by BP in January 2020 indicates that a more systematic and consistent approach to documenting stakeholder engagement activities has been implemented (through the AGT Community Engagement Log) since this issue was raised by the IESC in 2019. The IESC will closely monitor the ongoing quality of record-keeping and reporting of stakeholder engagement in place to meet both the requirements of the STSLMP, and Lender Standards.
- **One Observation was closed relating to grievance management and the lack of adequate documentation / recording and reporting of grievances,** including Community Liaison Officers' (CLOs) daily interactions with local communities (and low-level concerns and feedback). See related finding (above point). The IESC was provided with the AGT Community Grievances Log in January 2020 (which includes SD2 Project), which provides for more comprehensive grievance tracking and documentation. This grievance log adequately documents the robust process in place, consistent with the provisions of good international practice. This AGT Grievances Log, in combination with the AGT Community Engagement Log discussed above provide for comprehensive tracking of engagement and grievances and demonstrate a more proactive approach is now in place. IESC's ongoing attention will be placed on how grievances / feedback are considered by the Operator in planning and operations activities, and the provision of feedback to communities on the grievance process and outcomes. The IESC recommends that the next public meeting in local communities includes specific presentation / reminder of the grievance process in place / means of access to it, as well as providing feedback on grievance outcomes, and how BP incorporates feedback / grievances in planning and operations.
- **One Observation remains open in regard to the Sangachal Terminal Stakeholder Liaison Management Plan (STSLMP) and the inclusion of a description of vulnerable groups and individuals and the differential measures in place for engaging with them.** The IESC is satisfied that vulnerable people are adequately accommodated in practice in terms of engagement mechanisms, and commensurate with the risks and impacts of the Project at present, however these provisions should be formally captured in the STSLMP. The IESC notes the STSLMP has been updated since this observation was raised in 2019, and now mentions that people from vulnerable groups are being considered in community and social development projects, which is one of the key methods that BP utilises for stakeholder liaison. The revision of the STSLMP consistent with IESC comments is commended, though the IESC continues to recommend that engagement provisions for vulnerable groups are considered in a dedicated section of the STSLMP, including further identification and description of vulnerable groups, and a description of how all identified vulnerable groups are enabled to engage on the Project.

Environment

- **A Level 1 Non-Conformance (Low) is raised in regard to offshore environmental incidents** reported in which drill fluid spilled into the sea (approximately 135bbbls), reported in the AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019. Further, the Report notes that full compliance with BP discharge requirements and full compliance with PSA HSE requirements was not achieved on SDF03 based on the incidents that occurred.
- **One Observation in relation to material releases at the ST.** It is noted that there were 17 material release events at the ST in 2018 which is 5 more when compared to 2017. It is further noted that this data is for the entire ST, and the SD2 component thereof, accounted for 2 of these. While the IESC has previously documented material releases and spills, as reported by BP, more detail on the release events and responses are required to determine if this represent a non-conformance.

Health and Safety

- **One Observation is raised in relation to the fatality that occurred on 7th May related to a fire onboard the Pipe Lay Barge Huseynow (PLBH) vessel.** During the repair of an Injection Moulded Polypropylene Machine (IMPP) a flash fire occurred in station 7 on the PLBH Firing Line. 14 crew members were injured to varying degrees. Emergency response and medevac was activated and all injured personnel were sent ashore for medical treatment. The incident is still under investigation. Details provided to the IESC highlight a suitable immediate response to the incident and a risk based approach to the task where the incident occurred which is commended, particularly the "Go-No-Go" approach to undertaking the task again based on review, risk assessment and the incident investigation. The IESC were also provided an overview of causes and associated actions, both from the contractors and from BP. The detail provided highlights a high level and detailed investigation has taken place and suitable actions have been implemented. What remains to be ascertained is that the assurance by BP is implemented and this will be assessed at the next site visit.

1. Introduction

1.1 Background

Sustainability Pty Ltd (Sustainability) is the Lenders' Independent Environmental and Social Consultant (IESC), appointed by the Bank of China, acting as Inter-Creditor Agent (ICA) for the Lender group financing Lukoil Overseas Shah Deniz Ltd (LOSD).

The Shah Deniz (SD) gas field lies approximately 100km south east of Baku, within the Azerbaijani sector of the Caspian Sea. Development of the 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 foreign oil companies, including LOSD. LOSD is a 10% shareholder in Shah Deniz.

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 July 2015 (by Sustainability), 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 European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB) and the Black Sea Trade and Development Bank.

This Report details the IESC's findings for the desk-based monitoring exercise for the period May 2019 – December 2019. An 8-month monitoring period is assessed, reflecting the Lender reporting requirements for a report within 60 days of the end of the Financial Year. A site visit is planned to occur in April 2020, and for which a monitoring report will also subsequently be developed. The timing of the site visit was unable to be arranged to fall within this monitoring report submission schedule. Hence, the decision was made to submit an updated report subsequent to the upcoming site visit in April 2020. The IESC notes the decision to move to annual monitoring now that SD2 has substantially commenced operations. During the upcoming site visit in April 2020, a review of the need for a site visit will be made.

This report 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 (BP).

1.2 Project Description

The SD2 Project aims to deliver 16Bcma of gas sales, with peak condensate rates of 105Mbd through the installation of additional wells within the high-pressure gas-condensate SD Contract Area located approximately 70km 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 55km 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 transports gas to markets in Georgia and Turkey from the SD Stage 1 project. The SCP is 692km 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 bridge linked Production and Risers (SDB-PR) and a Quarters and Utilities (SDB-QU) platforms;
- 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/import to the SDB platform complex);
- Onshore SD2 facilities at the ST located within the SD2 Expansion Area; and
- Up to 26 producer wells.

The SD2 Project is linked to 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).

1.3 Status

The SD2 Project entered the start-up phase with the official inauguration event held at the ST on 29 May 2018. This was followed by the commencement of commercial gas deliveries to Turkey from the Shah Deniz 2 (via the

SCPx and TANAP), as planned, on 30 June 2018. The SDB facility commenced exporting gas and condensate to the onshore terminal at Sangachal in the third quarter of 2018, and production from SDB continues to ramp up.^{2,3}

In March 2019, the final handover was completed from BP's GPO (Project) to GOO (Operations), consistent with planning. The completion of construction activities at ST has resulted in the demobilisation of contractors and equipment from the former greenfield site used by the SD2 construction contractors for offices, accommodation and support facilities. This area has been partially restored to its pre-existing state with the exception of concrete pads that remain in-situ for possible future expansions.

The SD2 offshore drilling and completions campaign continued throughout the period with both the Istiglal and the Maersk Explorer MODUs. The above two rigs have drilled and completed 17 wells in total (four on the North Flank, four on the West Flank, four on the East South Flank, two on the West South Flank and two on the East North flank, one well on the West South flank was drilled to its final depth and suspended) for Shah Deniz 2 production and subsequent ramp up. BP notes in its 2019 Full Year Results that drilling operations are anticipated to continue to deliver all wells required to ramp up to plateau level.⁴

The Subsea Construction Vessel (SCV) Khankendi commenced mobilisation of Horizontal Lay System and Reel Hub Drive to prepare for umbilical and direct electrical heating installations which were scheduled for December 2019. The Pipe Lay Barge Huseynov (PLBH) completed its pipelay campaign in November 2019, and demobilisation activities thereof are also complete.

1.4 Scope of this Monitoring Report

The IESC reviewed the Operator's available monitoring reports detailing the Project's compliance with the Applicable Standards. The IESC's scope includes the 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.

The current scope of work is applicable to the monitoring of the project for the construction and operation phases. The objectives of the IESC monitoring assignment are:

- To verify that the Project is in compliance with the applicable standards in relation to the environment, local communities, health and safety;
- To identify any E&S and H&S related impacts, risks or liabilities which have not been properly mitigated or controlled in the Project;
- To assess the technical adequacy of the Project's E&S / H&S management system, its management plans and other related documents; and
- To recommend any necessary additional preventive and corrective actions to address any ESHS related impacts, risks or liabilities identified.

² BP Azerbaijan. 3rd Quarter 2018 Results. www.bp.com/.

³ BP Azerbaijan. 3rd Quarter 2019 Results. www.bp.com/.

⁴ BP Azerbaijan. 2019 Full Year Results. www.bp.com/

1.5 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 basis for evaluating the Project in terms of Lender policies is defined as follows:

- Equator Principles III (2013);
- EBRD Performance Requirements, 2014;
- EBRD Environmental and Social Policy, 2014;
- 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

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.

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”.

1.6 Sources of Information

The IESC completed a desk-based assessment of documentation to ascertain compliance with the environmental and social audit criteria. The monitoring findings are based on:

- Publicly available ESIA documentation;
- Publicly available information on the Project;
- Information provided by BP to its SD2 Project partners (monthly reports and progress updates).
- Information provided to the IESC by BP;
- Information provided to the IESC during previous monitoring / ESDD exercises in 2014, 2015, 2016, 2017, 2018, and 2019.

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

1.7 Report Limitations

Sustainability issued a Document Request to BP requesting key environmental, OHS and social documents and information to help provide an accurate review of the Project and status of previous findings. This Report has been prepared as a desktop review and as such is limited to the information and documents provided to the IESC. Further verification of the information provided could not be conducted.

1.8 Report Organisation

This report is presented to reflect the requirements delineated in the Monitoring Scope of Works. The format has been customised slightly to better align with Lender Standards and increase functionality.

- Executive Summary;
- Section 1: Introduction;
- Section 2: Findings;
- Section 3: Environmental and Social Management Capacity;
- Section 4: Social; and
- Section 5: Environment and Worker Health and Safety.

2. Findings

2.1 Summary Findings Table

This section tabulates a summary of the findings identified by the IESC. It includes newly open items and any follow-ups on issues identified in previous environmental and social monitoring periods. Any closed recommendations related to previously open issues are also included.

Items in the table are identified by number of the audit visit / monitoring exercise (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). Issues that have been closed out in previous monitoring reports are not reflected in this table. 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:** An issue that has been resolved adequately and which is now in conformance with the applicable lender environmental and social standards.

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
- EBRD PR EBRD Performance Requirements
- ESMP Specific Environmental and Social Management Plans

Table 1 May 2019 – December 2019 Monitoring Findings for the SD2 Project

Visit / Issue #	Monitoring Exercise	Closing Date	Description	Finding	Reference	Status	Comments
Environmental and Social Management System							
7.12	Apr 19 Feb 20		<p>IESC noted in 2019 that the AGT Waste Manual, and the EMS Manual did not reflect SD2 within their scope. Further, the STSLMP, and a number of other operational ESMS documents did not reflect that a review was conducted prior / during the incorporation of SD2 within the operational ESMS. The IESC notes that the two documents provided in January 2020 for review (STSLMP and the AGT Region Waste Manual) have been updated. Further, BP notes that it is currently working on updating the Environmental and Social Management System and will be able to share the updated version in the next cycle.</p>	Observation	IFC PS1 EBRD PR1 ADB SPS	Open	<p>This observation remains open, subject to the recommendations being implemented and evidence thereof provided. The IESC recommends that all operational management plans and other relevant documentation are reviewed to ensure that document controls are accurately captured and that provision for SD2 within the scope of ESMS documentation is clearly noted, where applicable.</p>
Stakeholder Engagement and Grievance Management							
1.9	Apr 19 Feb 20		<p>One Observation remains open in regard to the STSLMP and the inclusion of a description of vulnerable groups and individuals and the differential measures in place for engaging with them. The IESC is satisfied that vulnerable people are adequately accommodated in practice in terms of engagement mechanisms, and commensurate with the risks and impacts of the Project, however these provisions should be formally captured in the STSLMP.</p> <p>The IESC notes the STSLMP has been updated since this observation was raised in 2019, and now mentions that</p>	Observation	IFC PS1 EBRD PR1, PR10 ADB SPS ADB's policy on Incorporation of Social Dimensions into ADB Operations	Open	<p>The IESC recommends the inclusion of differential measures for engagement with vulnerable people to be included in the STSLMP through addition of a dedicated section that further identifies and describes vulnerable groups as appropriate, and provides specific and differential measures addressing how all identified vulnerable groups are enabled to engage on the Project.</p>

			<p>people from vulnerable groups are being considered in community and social development projects, which is one of the key methods that BP utilises for stakeholder liaison. The revision of the STSLMP consistent with IESC comments is commended, though the IESC continues to recommend that engagement provisions for vulnerable groups are considered in a dedicated section of the STSLMP, including further identification and description of vulnerable groups, and a description of how all identified vulnerable groups are enabled to engage on the Project (only one mechanism is described in the STSLMP).</p>				
1.10	Apr 19 Feb 20	Feb 20	<p>The Minor Non-Conformance was in relation to a lack of consistent and systematic documentation of engagement activities by BP. The IESC had been unable to verify meaningful engagement through documentary evidence provided. Records of stakeholder engagement were inconsistent with the reporting and record-keeping requirements of the STSLMP, which included the specification for use of a Communications Log.</p> <p>The Minor Non-Conformance in this regard is now considered closed. The evidence provided by BP in January 2020 indicates that a more systematic and consistent approach to documenting stakeholder engagement activities has been implemented (through the AGT Community Engagement Log) since this issue was raised by the IESC in 2019.</p>	Closed	<p>IFC PS1 EBRD PR1, PR10 ADB SPS ADB's policy on Incorporation of Social Dimensions into ADB Operations STSLMP</p>	Closed	<p>The IESC will closely monitor the ongoing quality of record-keeping and reporting in place to meet both the requirements of the STSLMP, and Lender Standards. An opportunity is noted to include a column in the AGT Community Engagement Log for follow-up actions undertaken and outcomes, as appropriate to the engagement activity.</p>

1.11	Apr 19 Feb 20		<p>A Level 1 Non-Conformance is opened relating to the requirement for public disclosure to neighbouring communities of the operations phase environmental and social management plans. The IESC understood that disclosure was being considered during 2019, however this has not occurred. BP has indicated that operations phase environmental and social management plans are now intended for publication during the course of 2020. The IESC strongly recommends that disclosure occurs as soon as practicable in 2020. The IESC has previously raised the need for operations phase disclosure of environmental and social management plans. This finding is raised to a Minor Non-Conformance Level, until such time as effective disclosure is demonstrated.</p>	Low	<p>IFC PS1 EBRD PR1, PR10 ADB SPS ADB's policy on Incorporation of Social Dimensions into ADB Operations</p>	Open	<p>Operations are now substantially commenced, and this information describes how potential impacts to local communities from the ST operations are managed and mitigated. The IESC strongly recommends that disclosure should occur as soon as practicable in 2020.</p>
1.3 / 1.4	Sep 15 May 16 Apr 17 Oct 17 Apr 18 Oct 18 Apr 19 Feb 20	Feb 20	<p>This observation related to the lack of adequate documentation / recording and reporting of grievances, including CLOs' daily interactions with local communities (and low-level concerns and feedback). See related finding 1.10. The IESC was provided with the AGT Community Grievances Log in January 2020 (which includes SD2 Project), which provides for more comprehensive grievance tracking and documentation. This grievance log adequately documents the robust process in place, consistent with the provisions of good international practice. This AGT Grievances Log, in combination with the AGT Community Engagement Log discussed above provide for comprehensive tracking of engagement and grievances and demonstrate a</p>	Closed	<p>IFC PS1 EBRD PR1, PR10 ADB SPS ADB's policy on Incorporation of Social Dimensions into ADB Operations</p>	Closed	<p>Up to this monitoring period, the IESC has been unable to verify, through access to grievance records, that the grievance mechanism is operational and effective for affected communities. This observations is now considered closed (closely related to 1.10 above). Ongoing attention will be placed on evidence that grievances / feedback are considered by the Operator in planning and operations activities, and the provision of feedback to communities on the grievance process and outcomes is occurring. The IESC recommends that the next public meeting in local communities includes specific presentation / reminder of the grievance process in place / means of access to it, as well as providing feedback on grievance outcomes, and how BP</p>

			more proactive approach is now in place. The IESC is able to close the open Observation on grievance management				incorporates feedback / grievances in planning and operations.
Health, Safety, and Security							
8.13	Feb 20		<p>There was a fatality on 7th May related to a fire onboard the PLBH pipelaying vessel. During the repair of an IMPP a flash fire occurred in station 7 on the PLBH Firing Line. 14 crew members were injured to varying degrees. Emergency response and medevac was activated and all injured personnel were sent ashore for medical treatment. The incident is still under investigation. Details provided to the IESC highlight a suitable immediate response to the incident and a risk based approach to the task where the incident occurred which is commended, particularly the “Go-No-Go” approach to undertaking the task again based on review, risk assessment and the incident investigation.</p> <p>The IESC was also provided an overview of causes and associated actions, both from the contractors and from BP. The detail provided highlights a high level and detailed investigation has taken place and suitable actions have been implemented. What remains to be ascertained is that the assurance by BP is implemented and this will be assessed at the next site visit.</p>	Observation	IFCPS2 EBRD PR2, PR 4 IFC EHS	Open	This will be a specific focus of the next monitoring exercise.
Environment							

8.14	Feb 20		<p>One Observation is noted that there were 17 material release events at the ST in 2018 which is 5 more when compared to 2017. It is further noted that this data is for the entire ST, and the SD2 component thereof, accounted for 2 of these. While the IESC has previously documented material releases and spills, as reported by BP, more detail on the release events and responses are required to determine if this represent a non-conformance.</p>	Observation	<p>IFC PS3 EBRD PR3 ADB SPS (Env)</p>	Open	<p>This will be a specific focus of the next monitoring exercise. Additional information required on release events and responses.</p>
8.15	Feb 20		<p>A Level 1 Non-Conformance is raised in regard to offshore an environmental incident reported in which drill fluid spilled into the sea (approximately 135bbls), reported in the AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019. Further, the Report notes that full compliance with BP discharge requirements and full compliance with PSA HSE requirements was not achieved on SDF03 based on the incidents that occurred.</p>	Low	<p>IFC PS3 EBRD PR3 ADB SPS (Env) BP HSE Standards PSA with Government of Azerbaijan</p>	Open	<p>This will be a specific focus of the next monitoring exercise. The IESC notes the remedial work to continue operations, as well as preventative actions for future wells, including the modification of the procedure for hose deployment, and the modification of the procedure for deployment and recovery of the Subsea Production System (SPS). Additionally, IKM [company] established a Fluid Return Line (FRL) hose register to identify the working history of each hose. IKM are also implementing long-term actions, including developing a hose with a higher burst pressure that will be introduced for BP as soon as the process is completed, and developing a hose inspection and testing plan to establish periodic routines for checking and recording hose conditions.</p>

2.2 Summary of Incidents Violations and Non-Compliance

Table 2 Summary of Incidents Violations and Non-Compliance

Issue	Summary Detail
Recorded dates and responsible agencies	See below in Table 3 for detail on Environment and OHS incidents.
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	

2.3 Summary of Incidents of Environmental, Health Concerns and Safety Accidents

Table 3 Summary of Incidents of Environmental, Health Concerns and Safety Accidents

Incident recorded dates and responsible agencies	Scale of damage / injury (if any)	Authorities in charge of investigation / recording	Results of investigations and reviews	Corrective actions, deadlines, identification of responsible parties Short term remedial action Long term preventative measures	Other environmental, health and safety initiatives which have been planned or implemented
07 May 2019	There was a fatality on 7th May related to a fire onboard the PLBH pipelaying vessel. During the repair of an Injection Moulded Polypropylene Machine (IMPP) a flash fire occurred in station 7 on the PLBH Firing Line. 14 crew members were injured to varying degrees. ⁶	Ministry of Labour and Social Protection of the Population / Azerbaijani Ministry of Emergency Situations	The incident is still under investigation. Not available at time of writing this Report	<ul style="list-style-type: none"> Emergency response and medevac was activated, and all injured personnel were sent ashore for medical treatment. Details provided to the IESC highlight a suitable immediate response to the incident and a risk based approach to the task where the incident occurred 	None noted / provided.

⁶ BP. SD2 Flowline Installation Update (in relation to Pipelay Incident). 13 June 2019; and other information provided by BP Operator.

				<p>which is commended, particularly the “Go-No-Go” approach to undertaking the task again based on review, risk assessment and the incident investigation.</p> <p>The IESC was also provided an overview of causes and associated actions, both from the contractors and from BP. The detail provided highlights a high level and detailed investigation has taken place and suitable actions have been implemented. What remains to be ascertained is that the assurance by BP is implemented and this will be assessed at the next site visit.</p>	
July 2019	<p>The End of Well Report⁷ (for SDF03 and SDF04 Top Hole) notes that full compliance with BP discharge requirements and full compliance with PSA HSE requirements was not achieved on SDF03. There were losses of 2 x 67bbls of Ultradrill drilling fluid into the subsea environment.</p>	Not applicable.	<p>The IESC reviewed the detailed NPT analysis with root cause. Key conclusions are as follows:</p> <ul style="list-style-type: none"> • Some of the original hoses showed signs of damage and seem to have been over-tensioned prior to the failure. It is not known if this over tension occurred on the same well or a previous deployment. • On this well, the SPS suction connection was facing away from the well during deployment. As the 	<p>The following occurred:</p> <ul style="list-style-type: none"> • The overall drilling operation was stopped to enable hose replacement. • A new set of hoses was ordered. • The entire FRL on MRR002 [material requisition form] was replaced with new hose sections. • The procedure for hose deployment was modified. • The procedure for deployment and recovery of the SPS was modified. 	<ul style="list-style-type: none"> • None Noted.

⁷ AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019.

			<p>SPS is suspended due to soft seabed, the ROV [Remote Operating Vehicle] needed to put a 180-degree rotation on the SPS. This rotation caused a 180-degree rotation also in the FRL [Fluid Return Line] and generated a “twist” that increased the stress on the hose.</p>	<ul style="list-style-type: none"> • IKM has established an FRL hose register to identify the working history of each hose. IKM will also conduct the following long-term actions: • The FRL supplier has started a development process to develop a hose with a higher burst pressure. This will be introduced for BP as soon as the process is completed. • IKM is developing a hose inspection and testing plan. This will establish periodic routines for checking and recording hose condition. 	
May 2019	<p>There was an offshore spill reported, in May 2019. The spill occurred during Vibro⁸ Hammer recovery activity, when hydraulic oil leaked from the hose connection inside the Vibro Hammer power pack boundary. Some oil sprayed through the air vent resulting in approximately 5 litres of oil spilled on the main deck. Remaining released oil was contained within the boundary of the Hydraulic Power Unit (HPU). No spill</p>	Not applicable	<p>No further information provided / reviewed. It was noted that there was no environmental impact as the spill was fully contained.</p>	<p>No further information provided / reviewed. It was noted that activities were stopped in order to clean up the spill.</p>	<p>None noted / provided</p>

⁸ Southern Gas Corridor CJSC. June 2019. Email Correspondence with Lenders in relation to Furnishing of Project Information on the Occurrence of a Spill.

	overboard occurred. Activity was stopped in order to clean oil.				
August 2019	One Loss of Primary Containment (LOPC) incident occurred onboard the Istiglal in August 2019, whereby hydraulic fluid was released into a pit. It was noted that there was no environmental impact as a result of the LOPC. The IESC did not review additional detail on, reporting into this event.	Not applicable	No further information provided / reviewed. It was noted that there was no environmental impact as the spill was fully contained.	No further information provided / reviewed. It was noted that activities were stopped in order to clean up the spill.	None noted / provided

3. Environmental and Social Management Capacity

Compliance Summary:

- **1 Observation** regarding the operational ESMS documentation. IESC noted in 2019 that the AGT Waste Manual, and the EMS Manual did not reflect SD2 within their scope. Further, the ST Stakeholder Liaison Management Plan, and a number of other operational ESMS documents did not reflect that a review was conducted prior / during the incorporation of SD2 within the operational ESMS. The IESC notes that the two documents provided in January 2020 for review (STSLMP and the AGT Region Waste Manual) have been updated. Further, BP notes that it is currently working on updating the Environmental and Social Management System documentation and will be able to share updated version in the next cycle. This observation therefore remains open, subject to the recommendations being implemented and evidence thereof provided.

3.1 Environmental and Social Management System

This section provides a description of IESC monitoring covering management programs, organisational capacity and competence, emergency preparedness and response, and monitoring and review.

IESC monitoring indicated the ongoing implementation of the environment, health and safety management system consistent with BP's corporate Health, Safety, Security and Environment (HSSE) commitment statement policies. All aspects of the SD2 ESMS transitioned to the operational systems in May 2018. The Operator continues to demonstrate a clear commitment to HSSE policies and achieving leading practice performance. BP's AGT Region manages operations 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 SDB gas platforms, and SD2 expansion of ST were included in the ISO14001 certificate scope during 2019.⁹

The final Systems Handover to operations was achieved in September 2018. Post-plant performance testing was conducted during the monitoring period, and the commissioning team remained on site during the testing. BP reported the close-out of commissioning contracts during 2019.¹⁰ BP operations teams are aware and have been trained in all operations phase SD2 ESIA commitments. The ESIA Commitment Compliance Register is noted as a key tool in this respect. All SD2 ESIA commitments previously held in the afore-mentioned register are located in the HSE Compliance Task Manager (CTM). CTM is a web-based compliance matrix (database) that establishes a system for managing relationships between applicable HSE legal and regulatory compliance requirements, compliance tasks, responsible and accountable parties, operational controls and completion evidence. CTM is accessible to personnel who are responsible for completing compliance tasks in the tool. In 2019, the IESC was provided an excerpt from the CTM of the SD2-specific tasks for both the ST and SDB. The IESC notes the effectiveness of the CTM as a tool, and the ability to track the SD2-specific commitments. This includes task-

⁹ BP-CDZZZZ-HS-MAN-0001 EMS Manual.

¹⁰ SD2 Partner Monthly Report. Dec 19.

specific identification number, description, frequency of monitoring / reporting, completion status, responsibilities, evidence / documents, citations, among others.¹¹

Operations phase HSSE management system documents (manuals, plans, and procedures) were reviewed by the IESC in 2019¹², including: AGT EMS Manual; AGT Region Waste Manual; AGT Region BP Azerbaijan Wildlife Response Plan; AGT Region Medical Emergency Response Plan; Stakeholder Engagement Procedure (Emergency Response); and BP ST Stakeholder Liaison Management Plan. The AGT Region EMS Manual describes the key operations systems and processes that are in place to manage environmental aspects associated with BP's operations in line with the requirements of ISO14001:2015 Standard for Environmental Management Systems. The EMS Manual does not include the SD2 operational facilities within its scope, but does note that the integration of SD2 operational facilities will be undertaken throughout 2019. The environmental and social plans provided to the IESC are generally fit for purpose, however the IESC noted in 2019, that that the AGT Region Waste Manual did not clearly specify the inclusion of SD2 facilities within its scope; an update to which the IESC would have expected to occur during the incorporation of SD2 within the BP operational systems. Further, the IESC noted that the document revision table was empty for the STSLMP, and that the plans reviewed did not generally reflect that a review was conducted prior / during the incorporation of SD2 within the operational ESMS.

The IESC was provided for review in 2020, the AGT Region Waste Manual, and the STSLMP, and both documents have been updated to take into account the IESC's recommendations. The STSLMP is further discussed in Section 4.1.1, and the IESC notes here that in relation to document control, recommendations have been actioned in full (names, dates, brief description of changes made, future revision timing). The AGT Region Waste Manual is also noted to have been substantially updated consistent with the IESC's recommendations. The IESC was not provided the other operational management plans to review, though it is noted that BP reports¹³ it is currently working on updating the Environmental Management System documentation and will be able to share updated documents in the next monitoring cycle. This observation therefore remains open, subject to the recommendations being implementation and evidence thereof provided.

Further to the above, the IESC observes that the specific operational environmental and social requirements and commitments relevant to SD2 are adequately captured in the CTM. However, the delay in updating operational environmental and social management plans and procedures following start up does increase the risk that operational mitigations and controls for SD2 facilities are not being implemented in a systematic manner. The IESC highlights the ongoing recommendation that the operational management system documentation be reviewed, and full evidence thereof be provided to the IESC. This includes ensuring that document controls are accurately captured and that provision for SD2 operational facilities within the scope of ESMS documentation is clearly noted in each plan, where applicable.

¹¹ SD Bravo CTM Tasks and ST SD2 CTM Tasks.

¹² Shah Deniz Gas Field Expansion Project: Environmental and Social Monitoring Report. Lukoil Overseas Shah Deniz. (November 2018 - April 2019).

¹³ 2020 SD2 Annual Monitoring Document Request – BP Responses.

The risk management tools employed by BP for the SD2 Project are proven processes that have been effective for existing operations at SD1 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. 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 are in place that provide effective controls for higher risk works. The SD2 Project implements a Risk – Talk – Check (RTC) process designed to facilitate worker involvement with the risk management and hazard perception to ensure HSSE risks are understood and controls implemented.

In 2020, the IESC reviewed the operations organisational chart for HSE roles, which shows sufficient resources available to achieve effective and continuous environmental and social performance, including clear lines of responsibility and authority to implement the ESMS¹⁴. Further, competent teams of health, safety, environment, and social professionals who are effectively resourced and trained have been observed implementing the health, safety, environment, and social management systems in place during previous site visits. BP ensures that its personnel have necessary competencies and are professionally trained to perform jobs. All employees, contractor employees and visitors pass through induction training covering HSSE and emergency procedures. Based on roles and responsibilities personnel additionally require different levels of environmental and compliance competency and awareness.

Environmental and compliance awareness sessions are provided on waste management, HSE compliance awareness and Compliance Task Manager (CTM) user training, Non-Conformance Reporting (NCR) process, flaring dispensations, etc., and records thereof are kept. In addition BP implements a "My Talent & Learning" web-based system that provides access to the web-based mandatory and self-development training materials. General environmental awareness campaigns noted during this monitoring period incorporated following subjects¹⁵: Waste management; Chemical management; Material release reporting; Environmental aspects and impacts; Advance Low Carbon which covers BP commitments, and strategies on GHG. Furthermore BP notes that plastic waste minimisation has been made part of the General Environmental Awareness Sessions. And the IESC commends the following actions in this regard that are noted to have been implemented so far:

- Plastic bags for fruits and deserts in canteen have been eliminated, saving around 16 kg of plastic per day.
- Plastic plates are no longer provided to tea points.
- Industrial and non-industrial sections of the canteen have been merged, therefore consumption of the single-use plastic dishes and cutlery items previously used in the industrial canteen has been eliminated.
- Packed lunch is now served in paper bags as opposed to plastic bags as it was before.

¹⁴ HSE RC&E. February 2020.

¹⁵ 2020 SD2 Annual Monitoring Document Request – BP Responses.

- The provider of 19L water buckets have been changed improving water quality therefore encouraging more people to reduce their consumption of 0.5L plastic bottles. 50% consumption may result in around 15t plastic saved per annum.
- Posters about plastic waste have been populated in the ST offices.

With regards to contractor management, BP provides oversight of contractors to ensure compliance with HSSE requirements through a structured program of HSSE audits, contractor self-verification and BP HSSE oversight. These are demonstrated in the Project Monthly Reports. Contractors on the SD2 Project have been significantly reduced since the commencement of operations, but contractor activity remains for offshore drilling, pipelaying, and operational waste management. The oversight process includes BP HSE personnel actively engaging with contractors to observe safety behaviours and develop HSE leadership. Contractor management is conducted through BP's operational HSSE management systems. All contractor HSSE plans are aligned with these systems and are expected to include robust processes for: contractor and sub-contractor management; legal compliance; crisis and emergency management; reporting of performance; HSE Organisation; and, assurance planning. BP's HSSE requirements include the requirement for contractor HSSE management systems be aligned with ISO standards: ISO14001 and OHSAS18001. The IESC notes the occurrence of a fatality in May 2019 onboard a contractor (Saipem) PLBH pipelaying vessel. This is discussed further in Section 5.3 Worker Health and Safety.

Communication of HSSE related issues and reporting of performance was evident through the both the desk-based review of documentation in January 2020 and observed in previous IESC site visits since 2014. This includes the scheduling of regular formal and informal meetings and recording of minutes. Communications with workers include the opportunity for worker input to HSSE programmes and clear authority for workers to stop work if unsafe practices are observed. Internal communication of environmental issues and performance is driven through a number of communication tools, such as Environmental Performance Dashboards, Facility Environmental Monitoring Reports, Periodic Performance Reviews, and awareness sessions, among others.

Emergencies are managed for through the BP Crisis and Continuity Management 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. BP areas and facilities maintain specific Emergency Response Plans, Oil Spill Response Plans and Oil Spill Contingency Plans, with facilities regularly testing their effectiveness through scheduled emergency drills / exercises. Emergency response capability is maintained at all work areas including medical and first aid facilities, on site ambulances, incident management teams and rescue capability.¹⁶

At least 20 emergency response exercise drills are undertaken per year, of which two to three exercises involve external and government emergency response providers in addition to the BP-AGT emergency team. The offshore delivery units undertake six to seven emergency response exercises annually. Each work site undertakes a weekly site muster and evacuation drill. As the Project has been handed over to the Operations team, no SD2-specific

¹⁶ AGT Region. BP-CDZZZZ-HS-PLN-0015-000. AGT Region Medical Emergency Response Plan.

drills were conducted during the monitoring period. BP reported the following drills occurred in the monitoring period:

- Onshore¹⁷:
 - 7 Emergency Deployment exercises conducted at Sangachal Terminal for mustering personnel (SD2 area inclusive);
 - 1 Deployment exercise was conducted with involvement of OSR contractor in order to practice response to condensate spill containment; and
 - 9 desk-top exercises were conducted with involvement of ST Incident Command Team in Emergency Response Room facilities, with involvement of plant SD2 Crisis Response Teams.
- Offshore:
 - 21 emergency exercises and 17 muster drills conducted offshore for the monitoring period;
 - 2 Man overboard exercises conducted with involvement of Emergency Rescue and Recovery Vessels.

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.

The IESC notes that emergency response and medevac procedures were activated in response to the incident on the PLBH, in which a fatality occurred in May 2019. The IESC notes the full incident investigation report is yet to be available, however detail on the incident, root causes, actions taken, among others were provided at the request of the IESC (see Section 5.3)¹⁸. The evidence provided also describes the high level emergency response actions undertaken, consistent with the provisions outlined in the AGT Region Medical Emergency Response Plan. The evidence also highlights a detailed investigation has taken place and suitable actions have been implemented. The IESC will focus on verifying that the assurance by BP is implemented and this will be assessed at the next site visit.

¹⁷ BP reported that due to the availability of the dedicated Site Fire Response Team, there was no direct engagement with government resources at SD2 area of the ST during the monitoring period.

¹⁸ IMCA Safety Flash 11/19 (May 2019). Fatality and multiple injuries – flash fire onboard pipe-lay barge; IMCA Safety Flash 24/19 (October 2019). Update to SF 11/19: Fatality and multiple injuries – flash fire onboard pipe-lay barge; BP. Marine Vessel Incident Learning. Confidential (provided to IESC on 20 February 2020).

4. Social

Compliance Summary:

- **A Level 1 Non-Conformance is opened** relating to the requirement for public disclosure to neighbouring communities of the operations phase environmental and social management plans. The IESC understands that disclosure has not occurred yet, though BP has indicated that operations phase environmental and social management plans are now intended for publication during the course of 2020. The IESC strongly recommends that disclosure occurs as soon as practicable in 2020. This finding is raised to a Minor Non-Conformance Level, until such time as effective disclosure is demonstrated.
- **A Level 1 Non-Conformance (Low) is Closed** in relation to a lack of consistent and systematic documentation of engagement activities by BP. The Minor Non-Conformance in this regard is now considered closed by the IESC. The evidence provided by BP in January 2020 indicates that a more systematic and consistent approach to documenting stakeholder engagement activities has been implemented (through the AGT Community Engagement Log) since this issue was raised by the IESC in 2019. The IESC will closely monitor the ongoing quality of record-keeping and reporting in place to meet both the requirements of the STSLMP, and Lender Standards.
- **One Observation was closed** relating to grievance management and the lack of adequate documentation / recording and reporting of grievances, including CLOs' daily interactions with local communities (and low-level concerns and feedback). See related finding (above point). The IESC was provided with the AGT Community Grievances Log in January 2020 (which includes SD2 Project), which provides for more comprehensive grievance tracking and documentation. This grievance log adequately documents the robust process in place, consistent with the provisions of good international practice. This AGT Grievances Log, in combination with the AGT Community Engagement Log discussed above provide for comprehensive tracking of engagement and grievances and demonstrate a more proactive approach is now in place. IESC's ongoing attention will be placed on how grievances / feedback are considered by the Operator in planning and operations activities, and the provision of feedback to communities on the grievance process and outcomes. The IESC recommends that the next public meeting in local communities includes specific presentation / reminder of the grievance process in place / means of access to it, as well as providing feedback on grievance outcomes, and how BP incorporates feedback / grievances in planning and operations.
- **One Observation remains open** in regard to the STSLMP and the inclusion of a description of vulnerable groups and individuals and the differential measures in place for engaging with them. The IESC is satisfied that vulnerable people are adequately accommodated in practice in terms of engagement mechanisms, and commensurate with the risks and impacts of the Project at present, however these provisions should be formally captured in the STSLMP. The IESC notes the STSLMP has been updated since this observation was raised in 2019, and now mentions that people from vulnerable groups are being considered in community and social development projects, which is one of the key methods that BP utilises for stakeholder liaison. The revision of the STSLMP consistent with IESC comments is commended, though the IESC continues to recommend that engagement provisions for vulnerable groups are considered in a dedicated section of the STSLMP, including further identification and description of vulnerable groups, and a description of how all identified vulnerable groups are enabled to engage on the Project.

4.1 Stakeholder Engagement and Grievance Management

4.1.1 Stakeholder Engagement

Validating that meaningful consultation and engagement is being conducted by BP has, and continues to be, a key focus area of the IESC. Since moving into the Operations phase, the IESC has sought to verify through access to engagement minutes and records, and direct consultation with communities, that CLOs are effectively resourced and active within communities; that community meetings and engagement activities are occurring commensurate with the Project's risks and impacts; that Project Information Centres (PICs) are being used effectively; and that vulnerable people continue to have mechanisms available to them to engage with the Operator.

The IESC is aware of ongoing interest in the Project by international NGOs. Specifically, the submission of a complaint to Project Lenders and directly to BP by Crude Accountability and the Public Association for Assistance to Free Economy (PAAFE), Azerbaijan. The complaint(s) relate to concerns around community access to environmental information, community participation, and grievance management. The initial complaint was submitted to BP (and Lenders) in September 2017, and there have been a number of rounds of responses by BP,

and corresponding rejoinders by the NGO, the latest of which occurred in May 2019¹⁹. A meeting was held between Crude Accountability and BP in July 2019 to discuss and resolve Crude Accountabilities concerns. The IESC notes the outcomes of the meeting include recognition by Crude Accountability of BP's provision of information on environmental monitoring and community engagement, as well as BP's willingness to engage with local communities and the finding the Company provides via their CSR fund.

In 2019²⁰ the IESC met with a number of BP personnel with social responsibilities, including the Environmental and Social Team Leader – BP AGT GPO, the Senior Government Affairs and Social Team Specialist; and a CLO, among others. A community meeting was facilitated in Sangachal Village, and the IESC also visited a community investment project funded by BP in Sangachal Village. Further, at the request of the IESC for detailed documentary evidence of stakeholder engagement and community meetings conducted and planned (including the topics discussed, dates and frequency of meetings; response(s) from community; etc.), the IESC was provided with a range of substantive evidence in 2019 and 2020. The below sub-sections address each focus area in turn.

Resourcing of Stakeholder Engagement: The SD2 onshore social impacts and community programmes are implemented by the BP Regional Communication and External Affairs personnel. BP CLOs are responsible for the day-to-day liaison and engagement with local communities relevant to operational activities and workforce, including management of community grievances, social issues, and employment. The BP Regional team also provide a broader social engagement function for 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.

BP has 3 full time CLOs, each of whom are responsible for a zone within Azerbaijan, covering the ST and the pipeline corridor within Azerbaijan (SCPx). There is a CLO responsible for the West Zone, another for Central Zone, and another for the East Zone and Terminal. The CLOs have been active throughout the construction phase of the SD2 Project, ensuring continuity in personnel was achieved once the contractor CLOs ceased activities with the commencement of SD2 operations. The IESC confirmed (in 2019) that there is a system in place to ensure that there is always one CLO available to take calls (call forwarding from other CLOs mobiles) and address community needs. CLO resourcing is considered to be adequate by the IESC.

Operational SEP: The operational Sangachal Terminal Stakeholder Liaison Management Plan (STSLMP) describes the approach to manage and mitigate potential impacts on stakeholders closest to the ST, in particular Sangachal, Azimkend/Massiv 3 and Umid communities. This plan is a key tool by which ST manages and monitors relationships with the communities and the wider stakeholder base. The STSLMP also includes a second part relating to the External Communication Plan for Abnormal and Emergency Events, denoting the key emergency risks in relation to the communities surrounding the ST, the mitigation measures, and communication thereof to

¹⁹ www.business-humanrights.org.

²⁰ Shah Deniz Gas Field Expansion Project: Environmental and Social Monitoring Report. Lukoil Overseas Shah Deniz. (November 2018 - April 2019).

communities. The 2019 review of the STSLMP found it to be generally consistent with good international industry practice, though a number of areas for improvement were identified and communicated to BP, including:

- The document control table was not completed, and there was no revision history for the STSLMP, it was not possible therefore to know when the plan was last revised, or when the next revision is planned.
- The plan did not provide a description of any differential measures for engaging with vulnerable individuals and groups as part of ST operations phase.

The Operator provided an updated STSLMP²¹ for review by the IESC in January / February 2020, noting that updates had been made to address IESC comments from 2019. In reviewing the revised STSLMP, the IESC notes that the document control and revision concerns have been addressed. On the second point raised, the IESC observes that the STSLMP now mentions that people from vulnerable groups including poor-growth families, and Internally Displaced Persons (IDPs) are considered in community and social development projects, which is one of the key methods that BP utilises for stakeholder liaison. The revision of the STSLMP consistent with IESC comments is commended, though the IESC continues to recommend that engagement provisions for vulnerable groups are considered in a dedicated section of the STSLMP, including further identification and description of vulnerable groups, and how all identified vulnerable groups are enabled to engage on the Project, including the myriad provisions in place for engagement with vulnerable groups (see further discussion below).

Engagement with Vulnerable Groups: In 2019, the IESC questioned the engagement mechanisms available to vulnerable people identified in the ESIA ([IDPs] living in surrounding communities, women, the elderly, disabled) to engage with the Company outside of the standard mechanisms (e.g. the grievance mechanism, annual community meetings). The Operator identified that vulnerable people within the local communities surrounding the ST are known to the CLOs, and that the CLOs' phone numbers are well publicised at the community level (including at PICs, through local elders and leaders, and community representatives). Further the Operator notes that the CLOs have had a constant presence working within these local communities on a daily basis throughout the construction of the SD2 Project and into the operations phase and are therefore available and accessible to meet with and engage vulnerable community members as may be needed. The participation of women and a disabled person in the community meeting attended by the IESC also provided an indication of the ability of vulnerable people to access engagement activities within communities,

The IESC is satisfied that vulnerable people are, in practice, provided sufficient differential mechanisms with respect to engagement by the Operator, however (as noted above) the IESC strongly recommends that these provisions are formally documented / included and monitored through the operations phase STSLMP.

Stakeholder Engagement, Community Participation and Access to Information: In regards to general stakeholder engagement, the IESC's focus was on validating that meaningful consultation and engagement are conducted by BP. This includes establishing that community engagement is adequately resourced (that there are sufficient CLOs active in the local communities). As noted above, the IESC was able to verify a sufficient number of CLOs active, given the phase of the Project, the size of the community, and the level of community interest in the Project (discussed below). The IESC also sought to verify the stakeholder engagement activities / meetings held during the

²¹ Sangachal Terminal Stakeholder Liaison Management Plan_BP-CDZZZZ-HS-REC-00800-000_Updated 18 February 2020.

monitoring period (and historically), including frequency thereof, attendees, meeting minutes, information shared, and community feedback in this respect, among others.

BP aims to hold at a minimum, one formal annual public information and awareness session in each of the key communities surrounding the ST (Sangachal, Umid and Azimkend/Massiv 3 settlements) to provide stakeholders with updated information regarding ST operations (including activities, monitoring data, employment information, etc.). Stakeholder engagement measures also include the operation of the PICs, local recruitment program, community development initiatives, and the implementation of the public complaints management procedure (grievance mechanism).

In response to the IESC request, BP provided the Sangachal Terminal Community Meeting Pack for the annual (2019) public information and awareness session held in September 2019. This presentation, included information on BP community development activities within the local communities (previous, current and upcoming), environmental monitoring activities and results (including air quality, surface and groundwater monitoring, soil and vegetation cover, fauna, birds monitoring, monitoring of wetlands, and noise measurement, among others). Photographs were also provided, including of the community notices of the meeting in various locations, and of the meeting itself. The meeting minutes were not provided to the IESC.

In 2019, contractor and BP records of engagement were provided in various formats, including (going back to 2016). The IESC raised a Level 1 Non-Conformance, as the various records of engagement did not allow substantial verification of this engagement. The engagement evidence provided varied in the level of detail and format and did not provide a systematic and consistent account of stakeholder engagement over time, as would be expected to occur based on the record-keeping and reporting requirements stipulated in the STSLMP (CLOs are required to enter all stakeholder engagement conducted into an action tracking system “Communication Log” consisting of “...minutes of meetings with local authorities, communities and with other stakeholders”²². The IESC recommended that the Operator further demonstrate consistent and systematic record-keeping and reporting of stakeholder engagement is occurring as per the requirements of the STSLMP, and consistent with Lender requirements outlined for meaningful engagement. This includes record-keeping of topics discussed, updates / information provided, Operator responses, and follow-up actions. In January 2020, BP provided documentation to the IESC demonstrating a more systematic approach to the tracking of engagement in place since this was raised in 2019. The IESC notes, the log includes the CLO names, dates of engagement, district, community village, engagement type, number of community members engagement, topic of engagement, photographic evidence (if any), and related documentation associated with the engagement activity. The IESC commends the implementation of a more formalised, consistent and systematic approach to tracking stakeholder engagement activities that has been implemented. An opportunity is noted to include a column for follow-up actions undertaken and outcomes, as appropriate to the engagement activity.

In the IESC's April 2019 site visit, the IESC was able to conduct verification of BP stakeholder engagement activities and practices directly with communities at a community meeting in Sangachal Village. The meeting was

²² Sangachal Terminal Stakeholder Liaison Management Plan_BP-CDZZZZ-HS-REC-0080-000.

attended by 21 community members from Sangachal in total, including one disabled person; the chair of the local school; members of the local municipality; pensioners; local residents; workers previously hired during the construction at SD2; and a local business operator (hairdresser), among others. The meeting was open to the general public, and it was publicised through local channels including local Government authorities, and community leaders within Sangachal Village. It should be noted that the IESC has not had any additional direct engagement with communities outside of the afore-mentioned meetings. The views expressed and documented below are representative of a small sample of community members. The IESC notes that the 2019 community meeting provided an opportunity to probe issues that were raised at a similar meeting attended during the IESC site visit in 2018, and obtain further understanding of a wider range of community opinions. Similar to the first meeting held with community members in April 2018, attendees appeared comfortable in participating and freely providing their opinions, and there was a general familiarity by attendees with the key BP personnel, and specifically CLO and BP HSEC personnel in attendance.

The meeting initially focused on establishing the community's key modes of communication with BP and the ST. Community representatives specified that communication is mostly conducted with the BP Communications and External Affairs (C&EA) Department (CLOs), and that communities are generally aware of the telephone numbers used to reach the CLOs. It was confirmed that these contact details are known as they published at the PICs. Furthermore, community members acknowledged that community meetings and notifications (flaring / noise) are advertised on PICs, and that this type of information is also accessed through local administration offices.

Most participants noted that they were attending the meeting to express their desire for work at the ST for themselves or for their family members. The IESC questioned participants on whether they had any environmental concerns regarding the BP ST as the previous meeting held in 2018 with the IESC raised air quality and health concerns. The community members clarified that their concern is regarding the emissions from the nearby power station (not the ST); adding that the visible emissions are impacting houses located nearby and emissions from this facility are getting worse. The power station is located immediately adjacent to Sangachal Village and the air emissions are visible from the entrance to the village. Also, heavy vibration and noise from this facility have increased since it was originally commissioned in 2014. The residents indicated they did not know who to call regarding concerns about this power station. One community member advised that the issues with the power station had been raised verbally with the power station operating company, but no actions had been taken by the relevant operators of the power plant.

Another participant mentioned that there are no noise issues from the ST, but there have been instances of high levels of light from the ST and sometimes from flaring. The community members were aware that BP provided notification of flare events through public notices and the local administration, 2 weeks prior to the events. They noted no concerns regarding water. Asked if people want more information about the emissions and environmental performance of the ST, the response was that they are not overly concerned with the ST so don't require this information. They would rather have information about how to get jobs. One community member said that there was no information provided by BP on environmental issues, employment or community development initiatives. The CLO present at the meeting disputed this, noting that the community member who made this statement was not at any of the previous meetings held with the local community where these issues were discussed. Some women present at the meeting were active participants in the meeting and did not express any gender-specific or different concerns.

Further to the 2019 meeting, and the clear community interest in ongoing employment opportunities, evidence provided by BP in support of the 2020 IESC monitoring, notes specific recent local employment opportunities provided to the local community members surrounding the ST, in which 53 local community members from the area neighbouring ST were recruited by the BP contractor BCC Group to construct the observation post and security fencing works as part of SD2 activities in 2019 (also discussed with communities during the September public meeting). Furthermore, continued efforts are noted by BP in working with its contractors to seek employment opportunities for community members around the ST on new projects. Correspondence between BP and contractor Azfen, sighted by the IESC indicates that as of January 2020, 441 people have been recruited by Azfen to the ACE project construction works. Further discussion on local employment is contained in Section 4.24.2.

BP indicated during the 2019 site visit that it is currently preparing to publish the results of its 22-year environmental monitoring surveys in Azerbaijan and is planning present these to the public in 2019. An update to this, in January 2020, notes that the results are currently undergoing printing and preparation in advance of publishing and public availability. BP intends to hold public sessions at the annual Caspian International Ecological Exhibition where this information will be presented and discussed, raising public awareness and providing an opportunity for members of the public to raise their concerns. A previous IESC monitoring report recommended that BP engage an independent scientific organisation or institution, trusted by the local community, to conduct a programme of engagement on environmental monitoring results. The IESC identifies an opportunity to combine this with the presentation of the 22-year monitoring results directly to local communities. This may assist in building trust in the Company's monitoring results and increase BP's social licence to operate.

In conclusion, the 2019 meeting with local community members assisted the IESC to verify that in practice, an effective engagement process is in place, along with adequate community access to BP CLOs and Project information/updates commensurate with operations phase of the Project and the key issues of concern to communities. It can also be noted that interest in the SD2 Project remains primarily around employment, and that there is less interest in other aspects (e.g. environmental impacts). The Minor Non-Conformance raised in 2019 was in relation to a lack of consistent and systematic documentation of engagement activities by BP. The Minor Non-Conformance in this regard is now considered closed by the IESC. The evidence provided by BP in January 2020 indicates that a more systematic and consistent approach to documenting stakeholder engagement activities has been implemented (through the AGT Community Engagement Log) since this issue was raised by the IESC in 2019. The IESC will closely monitor the ongoing quality of record-keeping and reporting in place to meet both the requirements of the STSLMP, and Lender Standards.

Disclosure of Operational Environmental and Social Management Plans: The IESC again highlights the need for public disclosure to neighbouring communities of the operations phase environmental and social management plans, considering that operations are substantially commenced, and that this information describes how potential impacts to local communities from the ST operations are managed and mitigated during the operations phase of the Project. Summary construction phase environmental and social management plan information was publicly disclosed by the Operator during construction. The IESC raised the need for operations phase ESMP disclosure with BP in 2019, and it was indicated that disclosure to meet Lender requirements would be considered in 2019 engagement activities. The IESC understands that disclosure has not occurred yet, though BP has indicated that operations phase environmental and social management plans are now intended for publication during the course

of 2020. The IESC strongly recommends that disclosure occurs as soon as practicable in 2020. This finding is raised to a Minor Non-Conformance Level, until such time as effective disclosure is demonstrated.

The content disclosed could be similar to the disclosure conducted in September 2017 of the SD2 construction phase management plans. The IESC notes that disclosure should occur in both English and Azeri, including to local communities in a format that is readily understandable and accessible. This may include summaries of the key management plans in plain non-scientific language placed at PICs, and local administration offices, as well as through discussion of the key components of the plans at community meetings. Further, the IESC would expect the plans to be published online.

BP Social Investment and Community Development: The IESC was provided the opportunity to visit a community development project in Sangachal village in 2019. The project is an Eco Park Project where BP is supporting a municipality initiative for improving open space that was previously used as a car parking area. BP provided landscaping and tree watering towards the project in Sangachal village. Several local community members came to the site during the visit and voiced concerns that landscaping was not in line with their wishes to have available car parking space and areas for children to play. The area was unsealed, and the watering of trees created muddy conditions which would not be ideal for a children's play area or for general public access. Operator personnel who participated on the visits appeared to be unaware that these concerns existed as they had worked through the local municipality authority and not directly with community members. The BP social team advised that they would discuss the issues raised with the local authority and identify where changes to the project may be appropriate in consideration of the concerns raised during the site visit. The IESC recommends that in future BP include engagement with target communities in defining community projects being implemented by other organisations or partners.

The public meeting held in September 2019 provided an opportunity for engagement and feedback on BP's community development activities. The IESC notes ongoing opportunities for local feedback / input to be harnessed in the development of relevant local community development initiatives.

4.1.2 Grievance Management

A focus area of the IESC at this monitoring opportunity was on grievance management, and specifically verifying the SD2 grievance mechanism through review of grievance data and records. This has been an ongoing priority for the IESC. It was noted by the Operator that no grievances were recorded for this monitoring period for the SD2 Project (and also for the previous monitoring period). In 2019, upon request BP supplied historical grievance records, going back 2 to 3 years, to allow the IESC to validate the effectiveness of the mechanism. Of particular importance to the IESC was the ability to confirm that grievance records show a description of complaint / feedback; remedial actions taken by Company / contractor (including consideration and incorporation of feedback in planning and operations), status of grievance and timeframes for resolution, provision of feedback to communities on grievance process outcomes, among others. The following grievance records were provided to the IESC relating to the SD2 Project:

1. BP – Saipem Shah Deniz Phase II Community Grievance Log (as of November 2016);
2. SD2 Onshore Sangachal Terminal Construction Project Grievance Register (2014 - 2016);
3. Azfen (Contractor) – List of Complaints (2015- 2016).

4. Azfen (Contractor) - 6 month PIC Report (2018).

The IESC notes the comprehensive provisions for grievance recording and tracking provided for in the BP – Saipem Shah Deniz Phase II Community Grievance Log. This grievance register depicts a number of grievances that were raised and addressed in relation to the Fishing Livelihoods Management Plan process, which has been previously noted and commended by the IESC.

From the IESC's discussion with the BP HSEC personnel during the 2019 site visit, and meeting with community representatives, it was understood that many concerns / feedback were not making it into the formal grievance mechanism as these were able to be addressed informally or in person and immediately by CLOs in the field. It was also noted by BP HSEC personnel that there is a preference among community members to engage directly and informally with CLOs or anonymously through the message box at the PICs in the event that they have a question or concern. This is a key reason that the IESC requested the records of stakeholder engagement (engagement log, monthly/weekly CLO reports, records from PICs.) in order to verify that these low-level concerns and informal feedback from communities were being tracked, monitored for trends, incorporated in ongoing management planning and operations, and actions reported back to communities. These low-level concerns and feedback are important, particularly in alerting BP to stakeholder sentiment, trends in perceptions and attitudes, and also as an early warning system of issues that may be insignificant now, but grow into larger issues if not adequately addressed.

Based on the above, in 2019 the IESC concluded partial satisfaction with the evidence provided to demonstrate effective grievance management, namely the grievance records; however there remained a gap in relation to the documentation and reporting of CLOs' daily interactions with local communities (including the low-level concerns and issues). As noted above, this was raised as a minor non-conformance in relation to stakeholder engagement, which was able to be closed out in this monitoring report.

The IESC was provided with the AGT Community Grievances Log in January 2020 (which includes SD2 Project), which provides for more comprehensive grievance tracking and documentation, consistent with the BP – Saipem Shah Deniz Phase II Community Grievance Log, that the IESC has previously commended. This grievance log adequately documents the robust process in place, consistent with the provisions of good international practice. This AGT Grievances Log, in combination with the AGT Community Engagement Log discussed above provide for comprehensive tracking of engagement and grievances and demonstrate a more proactive approach is now in place. The IESC is able to close the open Observation on grievance management, though ongoing attention will be placed on how grievances / feedback are considered by the Operator in planning and operations activities, and the provision of feedback to communities on the grievance process and outcomes. The IESC recommends that the next public meeting in local communities includes specific presentation / reminder of the grievance process in place / means of access to it, as well as providing feedback on grievance outcomes, and how BP incorporates feedback / grievances in planning and operations.

4.1.3 Human Rights and Transparency

BP adheres to the provisions on human rights as set out in the International Bill of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the UN Guiding Principles on Business and Human Rights, and the Voluntary Principles on Security and Human Rights. Focus is on 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. It was noted during the 2019 site visit that BP is currently implementing measures in compliance with the UK Modern Slavery Act. This includes, at a global level, awareness-raising, risk reviews and enhancing contractual frameworks. BP indicated that enhanced contractual provisions for modern slavery are being implemented progressively in Azerbaijan as contracts come up for renewal.

As noted in previous monitoring reports, a focus of the IESC has been in relation to human rights and transparency in relation to the Extractive Industries Transparency Commission (EITC) established on the 05th of April 2017 subsequent to Azerbaijan's withdrawal from the Extractive Industries Transparency Initiative. The EITC 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. The IESC noted, at the time of Azerbaijan's withdrawal from the EITI, concerns including about the ability of civil society to freely participate in the resource governance space in Azerbaijan (which may also impede the BP's ability to conduct effective engagement with these stakeholders). As remarked in prior monitoring reports, the EITC has representatives from extractive companies, Government, and civil society. Additionally, civil society actors, and international organisations have participated in the EITC meetings, and an international firm (Grant Thornton) is engaged to prepare the EITC report for 2018-2019²³. The IESC confirmed the ongoing participation of the Operator in the EITC process in 2019, as well as ongoing third-party oversight of the process and inclusion of civil society actors in EITC processes.²⁴

4.2 Labour and Working Conditions

4.2.1 Worker and Sub-Contractor Management

SD2 Project contractor demobilisation was completed in 2018, prior to operations phase commencement. It is noted that 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. The SD2 Project contractors managed the workforce demobilisation with BP oversight, including following plans and procedures designed to ensure a fair and transparent termination process according to social and legal requirements. The de-manning process included provision of a minimum of 1-month notice prior to redundancy taking affect. A completion payment was provided at the end of employment for workers who had been engaged for a minimum of 12 months. The completion payment exceeded the requirements of local labour laws and was made under Project employment conditions. The IESC was able to corroborate the de-manning and LMF process through limited discussion at the 2019 community meeting with community members that had previously been employed on the SD2 Project. This includes the required notice period for redundancy and completion payments.

Records provided in 2019 and 2020 by the main construction contractor (TKAZ) indicate that throughout the contractor's engagement on the SD2 Project, recruitment was tracked methodically, including the demographics

²³ The Extractive Industries Transparency Commission. 2019. "Extractive Industries Transparency Commission held its next meeting". hssk.gov.az.

²⁴ Extractive Industries Transparency Commission of the Republic of Azerbaijan. Extractive Industries Transparency Independent Auditor's Report. For the year ended December 31, 2017.

(with reference to expats vs. national, gender, location of local employees surrounding the ST, professional and non-professional, among others.). The following table shows the breakdown of total local employees from villages near the ST working for TKAZ up to the commencement of SD2 Project de-manning²⁵. At the peak of recruitment TKAZ hired 1,449 employees from local communities, 382 of whom still had active employment in the last quarter of 2017. At the end of the demobilisation process in 2018, TKAZ indicated that consistent with the BP recruitment and employment strategy for personnel from local communities, TKAZ retained 112 local people in active employment.

Table 4 TKAZ Workforce Breakdown - Local Community Near ST

Breakdown of Total Workforce by Community				
Location	Professional Employees		Non-professional Employees	
	Number	% of workforce	Number	% of workforce
Sangachal	373		80	
Umid	115		31	
Sahil	708		134	
Azimkend	5		3	
Total:	1201	25.49%	248	32.89%

Of TKAZ's total local employees (identified in the above table), 317 were IDPs (classified in the SD2 ESIA as vulnerable people)²⁶. In discussion with BP, the IESC was informed that vulnerable people, including IDPs, were targeted to ensure their access to specific recruitment programs and for community investments programs within their communities. The IESC also notes local community recruitment and information sessions documented by TKAZ in the communities surrounding the ST, including Sangachal (35 sessions); Umid (25 sessions); Sahil (97); Azimkend (5). TKAZ reports that assisting local employees to find onward employment once they had been demobilised from the SD2 Project was a priority. To this end, "re-recruitment" for 80 personnel for the HAOR Project (Baku NZS) was facilitated, and 127 personnel were employed at the Azerkimya Project (Sumgait).²⁷ Continued efforts are noted by BP in working with its contractors to seek employment opportunities for community members around the ST on new projects, as discussed above in Section 4, including contractor Azfen recruitment of 441 people to the ACE project construction works, and the 53 local community members from the area neighbouring ST recruited by the BP contractor BCC Group to construct the observation post and security fencing works as part of SD2 activities. In addition BP notes that there are 190 BP workers involved in the remaining SD2 construction activities.²⁸

Labour Management Forums are in place to discuss and resolve key HR/IR issues relevant to contracts and BP personnel. The Labour Management Forum Dashboard includes covering the following topics: Workforce

²⁵ TKAZ. 2016 08 August – Updated Format of Statistical Data Report.

²⁶ Email. Azfen to BP. Meeting with Local Communities – Sangachal 16.11.2018.

²⁷ Email. Azfen to BP. Meeting with Local Communities – Sangachal 16.11.2018.

²⁸ 2020 SD2 Annual Monitoring Document Request – BP Responses.

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 able to review a sample of LMF Dashboard minutes (a longstanding request) in 2019. The IESC's review confirmed that the Operator and its contractors effectively addressed concerns about workforce demobilisations by communicating the nature of the project, bonus amounts and procedures, and legislative requirements associated with demobilisation among others. Further, it is noted that the LMF minutes indicated the communication to personnel of relevant community investment / development projects that may benefit members of the demobilised workforce through skills diversification (computer literacy, SME development programs, etc.). The LMF minutes demonstrate a systematic and effective process in place for labour management, and the IESC commends this process. The IESC understands that the LMFs are ongoing within the SD2 operations phase in order to effectively manage labour and employment issues, as required. No Labour Management Forums were held during this monitoring period.

4.2.2 Worker Grievances

BP has demonstrated an effective labour management process through the LMF, which reviews workers grievances and concerns, among others. Throughout the de-manning process, BP and its contractors reported no significant labour or community disputes as a result of de-manning, indicative of an effective process in place. The IESC did not review the internal Human Resources grievance log / records illustrating the worker grievance mechanism (as opposed to the external / public complaints mechanism which is discussed the above section on grievance management) in place during this monitoring period. BP reports that there were no grievances during this monitoring period. The IESC understands that the SD2 Project is in the operations phase and that there is a much smaller workforce in place and thus less potential for worker grievances. However, the IESC upholds the request for the provision of the BP operational HR Grievance Log.

4.2.3 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 is used to screen suppliers in a consistent way anywhere in the world. As noted in the above section, BP is also in the process of incorporating the provision of the UK Modern Slavery Act into their contracts with suppliers and contractors.

BP procurement is largely from Azerbaijan by Azerbaijani 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 are largely reduced now that the SD2 Project is in the operations phase as a result of the decrease in the number of workers / contractors in the supply chain.

4.3 Land Acquisition, Resettlement and Livelihoods Restoration

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 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 stated 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”.

From July 2015, an independent consultant (AECOM) completed quarterly monitoring of the 48 eligible fishermen subject to compensation for economic displacement. 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.

As noted in 2018 IESC monitoring reports, the IESC was able to engage directly with affected fishermen during the April 2018 monitoring visit. These representatives corroborated the above described conclusions, including ongoing implementation (and understanding) of the grievance process and its accessibility. The fishermen present in the meeting voiced that communications between the company and fishermen was very good and the company addressed issues/concerns quickly. There were no other issues related to fishing during the 2019 site visit. It was also noted that there are signs that fishing activities have continued post construction as fishing nets have been installed in the coast within vicinity of the plant.

4.4 Community Health, Safety and Security

BP has previously advised of the occurrence of emergency drills involving internal and external communications with various stakeholders (government and non-government) through the existing community engagement process. The IESC notes the emergency drills conducted during this monitoring period, including involvement of the MES. In addition, the operational STSLMP includes a second part that deals specifically with emergency notification and communication with local communities regarding potential abnormal or emergency events.

The STSLMP notes the Inter-Agency Security Group that was established by BP in 2006. This forum facilitates dialogue between BP, community members and government security providers – including local police and the government’s designated pipeline security agency, the Export Pipeline Protection Department. The plan also notes the priority given to the identification of the information to be provided to surrounding communities prior to emergency events and also in the event of emergency situations, as well as the format thereof. As a part of the STSLMP, it is stated that the BP Communications & External Affairs team will develop leaflets/brochures and together with Inter-Agency Security Group will inform communities (Sangachal, Umid and Azimkend/Massiv) about relevant Incident Management Process, and will arrange awareness sessions to reply to community questions in this context. Furthermore, it is specified that these sessions will be arranged on a regular basis. In the IESC review of the community meeting presentation from September 2019, there is no information included on emergency

response and incident management in relation to local communities therein. The IESC will seek further verification of these communications and awareness sessions at the next monitoring opportunity, particularly in light of the SD2 Project being incorporated within the operational ambit of the ST. The IESC has previously recommended the Operator include specific advice in upcoming community meetings on emergency response protocols relevant to the operations phase of SD2. It is also noted that engagement on emergency response management should be included as part of the disclosure of the operations management plans discussed in Section 4.1.1.

Noise monitoring is undertaken at, and surrounding the ST to verify compliance with agreed noise criteria and determine whether activities are contributing to breach of noise criteria. The noise monitoring program undertaken during construction included noise criteria derived from British Standard, BS5228-1:2009. Action triggers occurred if criteria were exceeded on three sequential occasions during the same monitoring round due to Project activities. The operational noise monitoring of the SD2 facilities has now been incorporated within the ST environmental and hygiene monitoring programmes with specific SD2 noise monitoring commitments captured with the ST CTM tasks. As discussed further in Section 5.1.4 noise monitoring data is presented regularly to nearby communities and communities are notified of upcoming noise events. BP advised that there have been no noise complaints received from communities through the formal grievance process since construction works commenced on SD2.

The IESC was able to discuss key community concerns and issues directly with community representatives during the April 2019 site visit. As noted above, the key concerns expressed by communities in relation to community health and safety centred on a power plant situated next to Sangachal village. Documented in the last monitoring Report, an issue raised by community representatives at the community meeting attended by the IESC in April 2018 was in relation to health impacts on communities as a result of environmental pollution. As discussed in detail in Section 4.1 the members of the Sangachal community present in the meeting did not identify health and safety concerns associated with the operations of SD2.

4.5 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.²⁹ 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. 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. The IESC reviewed the SD2 Sand Cave Vibration Monitoring Report in the last monitoring period, which presented the findings of the final Round 20 survey (which occurred in March – April 2018). These include:

- Six rounds of vibration measurements were carried out during Pipeline Landfall Area reinstatement, lagoon filling and terrace area grading/backfilling activities.
- Vibration levels during the survey did not cause an exceedance of the continuous vibration trigger (0.5 mm/s PPV) at the Sand Cave. Isolated occurrences of single vibration levels above 0.5 mm/s PPV (maximum 1.46 mm/s) were noted at all locations. However, these did not constitute a trigger event as the exceedances did not occur over three successive 10-second samples. No damage to the Sand Cave site was observed throughout the works.

In the last monitoring report, it was noted by BP³⁰ that the Marine Archaeology Review was completed for SD2 Pipelines and North Flank / West Flank Flowlines locations. The likelihood of any cultural heritage objects being present in the North Flank or West Flank flowline or subsea pipelines' vicinity was considered extremely low, and potential impacts from the pipeline and flowline installation activities are considered insignificant.

²⁹ Responses to Lukoil Lenders' Requests Slide Pack, November 2017, and BP. *SD2 Partner and Lender Visit Presentation*. April 2018.

³⁰ SD2 IESC Desk-Based Monitoring (May 2018 – October 2018) Document Request – Formal Response from BP.

5. Environment & Worker Health and Safety

Compliance Summary:

- **A Level 1 Non-Conformance is raised in regard to offshore environmental incidents** reported in which drill mud spilled into the sea, reported in the AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019. Further, the Report notes that full compliance with BP discharge requirements and full compliance with PSA HSE requirements was not achieved on SDF03.
- **One Observation in relation to material releases at the ST.** It is noted that there were 17 material release events at the ST in 2018 which is 5 more when compared to 2017. It is further noted that this data is for the entire ST, and the SD2 component thereof, accounted for 2 of these. While the IESC has previously documented material releases and spills, as reported by BP, more detail on the release events and responses are required to determine if this represent a non-conformance.
- **One Observation is raised in relation to the fatality that occurred on 7th May related to a fire onboard the PLBH vessel.** During the repair of an IMPP a flash fire occurred in station 7 on the PLBH Firing Line. 14 crew members were injured to varying degrees. Emergency response and medevac was activated and all injured personnel were sent ashore for medical treatment. The incident is still under investigation. Details provided to the IESC highlight a suitable immediate response to the incident and a risk based approach to the task where the incident occurred which is commended, particularly the “Go-No-Go” approach to undertaking the task again based on review, risk assessment and the incident investigation. The IESC were also provided an overview of causes and associated actions, both from the contractors and from BP. The detail provided highlights a high level and detailed investigation has taken place and suitable actions have been implemented. What remains to be ascertained is that the assurance by BP is implemented and this will be assessed at the next site visit.

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 was one spill reported offshore in May 2019 that occurred, when during Vibro Hammer recovery activity, hydraulic oil leaked from hose connection inside the Vibro Hammer power pack boundary. Some oil sprayed through air vent resulting in approximately 5 litres of oil spilled on the main deck. The remaining released oil was contained within the boundary of the HPU. No spill overboard occurred. Activity was stopped in order to clean oil. Furthermore, the Operator noted that no environmental impact occurred as a result of the spill, as it was fully contained.³¹

In regard to drilling and completions, the Maersk Explorer MODUs commenced drilling at a West South Flank location in December 2019, while the Istiglal rig continued drilling top holes at location on the East North Flank. The development drilling campaign being completed by the Istiglal and Maersk Explorer MODUs have had no significant well control or spill incidents during the campaign to date. One Loss of Primary Containment (LOPC) incident occurred onboard the Istiglal in August 2019, whereby hydraulic fluid was released into a pit.³² It was

³¹ Southern Gas Corridor CJSC. June 2019. Email Correspondence with Lenders in relation to Furnishing of Project Information on the Occurrence of a Spill.

³² AGT Region. BP-MOZZZZ-HS-FRM-0001-000. MODUs Environmental Monitoring & Reporting Forms,

noted that there was no environmental impact as a result of the LOPC. The IESC did not review additional detail on, reporting into this event.

With regard to well control incidents, the IESC provided with two AGT Drilling End of Well Reports³³ that occurred during the monitoring period. The one report³⁴ (for SDF03 and SDF04 Top Hole) notes that full compliance with BP discharge requirements and full compliance with PSA HSE requirements was not achieved on SDF03. The reasons for this are that there were two environmental incidents in which drill mud spilled into the sea. The IESC raises this as a Level 1 Non-Conformance. The IESC reviewed the detailed Non-Productive Time (NPT) analysis with root cause, and it appears that a full response and investigation into the incident was conducted, including implementing preventative actions for future wells (see also Table 3 for further detail on remedial actions, and results of investigations).

The well testing and reporting program includes daily testing during drilling and completion work with reporting within 10 days of the testing to Operators' Well Environmental Specialist who uses the data for the Environmental Drilling Report to the MENR. 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 drilling.

Further to the above, the IESC raises an observation that there were 17 material release events at the ST in 2018 which is 5 more when compared to 2017. This figure accounts for all material releases at the ST, and it is noted that the SD2 components account for only 2 of these events. This comparison was provided in the *2018 Sangachal Terminal Annual Operational Monitoring Report* shared with the IESC in February 2020. The IESC has reviewed material releases and spills data previously, as well as reviewed relevant incident reports and been satisfied with their provisions. However, more detail on the 2016 - 2019 release events and responses are required to determine if this represents a non-conformance.

5.1.2 Waste Management

The operations phase Waste Management and Minimisation Plan, aligned with BP's AGT Region Waste Manual is in place for the Project. This includes key responsibilities and accountability; waste forecasting requirements; segregation; application of the waste management hierarchy; organisational structure; training; monitoring and reporting. The IESC noted in 2019 that the AGT Region Waste Manual did not include Shah Deniz 2 as part of the scope of the manual and recommended updating it to ensure provisions for SD2 as part of AGT operations was

SD Operations and Total Costs Monthly Report for December 2019.

BP Exploration (Caspian Sea) Ltd. Maersk Explorer – SDH-02az Well, Environmental Drilling Report.

³³ AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019, and AGT. SDC05 Top Hole. Drilling End of Well Report. December 2019.

³⁴ AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019.

made in full. The IESC commends the revision of this manual consistent with the comments made, and notes that a full review of the plan was conducted in August 2019 and well documented.³⁵

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 was included in the SD2 ESIA. Predicted volumes and waste streams for hazardous materials are provided. The IESC notes the ongoing tracking, monitoring and reporting of SD2 ESIA waste commitments is occurring via the CTM. In addition the IESC also reviewed the SD2 Waste Report (2019) providing the detailed waste types and volumes for both hazardous and non-hazardous waste.³⁶

Offshore drilling records of drilling cuttings disposal, including volumes discharges to sea, for water based muds, and onshore disposal of oil based mud cuttings are recorded daily and reported in the End of Well Reports. These reports include details of completion fluid additives and cementing chemicals used. The two MODUs report monthly to the Operator the waste logs of all waste materials sent to shore. The MODUs compile monthly reporting of all discharges and fuel used with the data used to report to MENR.

5.1.3 Air

The IESC reviewed the quarterly Sangachal Ambient Air Quality Monitoring Data reports produced by Azecolab in January 2019, May 2019, July 2019, and November 2019. The monitoring involves 18 sites surrounding the ST as a part of a long term quarterly program, including the nearby Sangachal village. Passive sampling, using pads and diffusion tubes, is undertaken at 17 sites to monitor for NO_x, NO₂, SO₂, BTEX/TVOC. The passive samples are taken over a 30 day period each quarter. Active radiation background, using a digital survey meter and PM10 using a high-volume sampler, is carried out biannually. The data from the continuous real-time air quality monitoring located near the entrance to the Sangachal village is reported annually with the data from this monitoring period being available in August 2019. All results were found to be within the relevant Azeri and EU standards (see Table 5 for summary of results range).³⁷

Table 5 Air Quality Monitoring Results, Quarter 4 2019

Parameter	Range (ug/m3)	Method
NO	<0.5 – 8.5	Passive sampling over a 1 month period
NO2	2.0 – 19.9	Passive sampling over a 1 month period
NOx	4.8 – 24.7	Passive sampling over a 1 month period
SO ₂	<2 – 21	Passive sampling over a 1 month period
Benzene (1)	0.3 – 1.0	Passive sampling over a 1 month period
Benzene (2)	0.3 – 1.1	Passive sampling over a 1 month period

³⁵ BP. AGT Region Waste Manual (Updated August 2019).

³⁶ SD2 Waste Report (2019).

³⁷ 4Q2018 ST AAQ Raw Data Report.

PM10 ³⁸	17 - 47	Passive sampling over a 1 month period
Radiation background ³⁹	0.08 – 0.13 (uSv/h)	Active radiation background, using a digital survey meter
Total VOC (1)	12.8 – 116.8	Hi volume daily sample
Total VOC (2)	27.5 – 96.8	Hi volume daily sample

In regards to GHGs, key GHG emission reduction considerations in design included flare reduction measures; offshore gas compression preferred above onshore compression; offshore flaring chosen over 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 2018*⁴⁰, includes the GHG emission data for BP's Caspian offshore operations and the ST.

The Operator reports 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 undertaken following introduction of hydrocarbons in 2018 was noted to be available in the 22-Year Consolidated Annual Report to be prepared by August 2019. BP provided an update on this in February 2020, indicating that the Report is currently being printed and will be available for review thereafter (in the coming months).

Resource efficiency measures adopted for flaring for onshore and offshore facilities are 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. In addition, BP has signed up to the World Bank Zero Routine Flaring by 2030 initiative, joined the Climate and Clean Air Coalition's Oil and Gas Methane Partnership and Oil and Gas Climate initiative.⁴¹

The flaring of gas from operational and emergency flares is reported monthly and tracked against targets that are set by the Operator on an annual basis. The flare data presented in Figure 1 for onshore and Figure 2 for offshore facilities, shows that flaring during the commissioning and early operations period was substantially higher than

³⁸ Note the PM10 results presented are from the May 2019 Sangachal Ambient Air Quality Monitoring Report (2019RN1) prepared by Azecolab. Results for PM10 were not reported in the November 2019 Report as these results are reported bi-annually.

³⁹ Natural Radiation background in Absheron peninsula is between 0.05-0.20 uSv/h (depending on geology structure of soil area and year period).

⁴⁰ BP Azerbaijan. Sustainability Report. 2018. <https://www.bp.com>.

⁴¹ *Ibid.*

current flare volumes. Note that offshore flaring data provided covers the period November 2018 – April 2019, while the onshore data shows the period November 2018 – December 2019⁴². The onshore flare rates remained within the targets for the period. As illustrated, the offshore flare rates were substantially higher than expected in November 2018 due to extended shut downs during commissioning/early operations offshore.

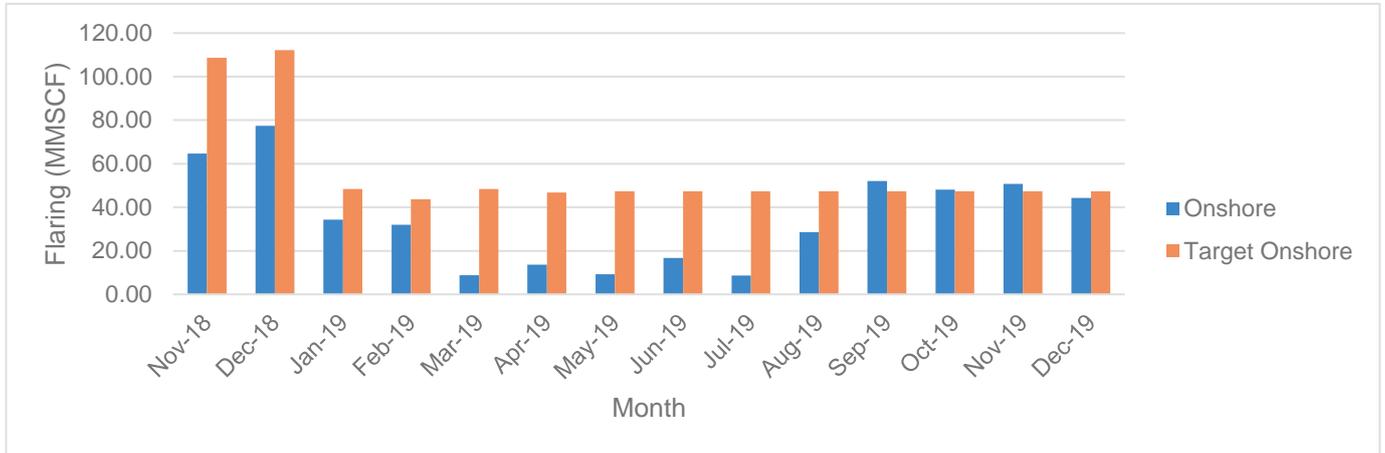


Figure 1 Onshore Flaring vs Target Flaring (November 2018 - December 2019)

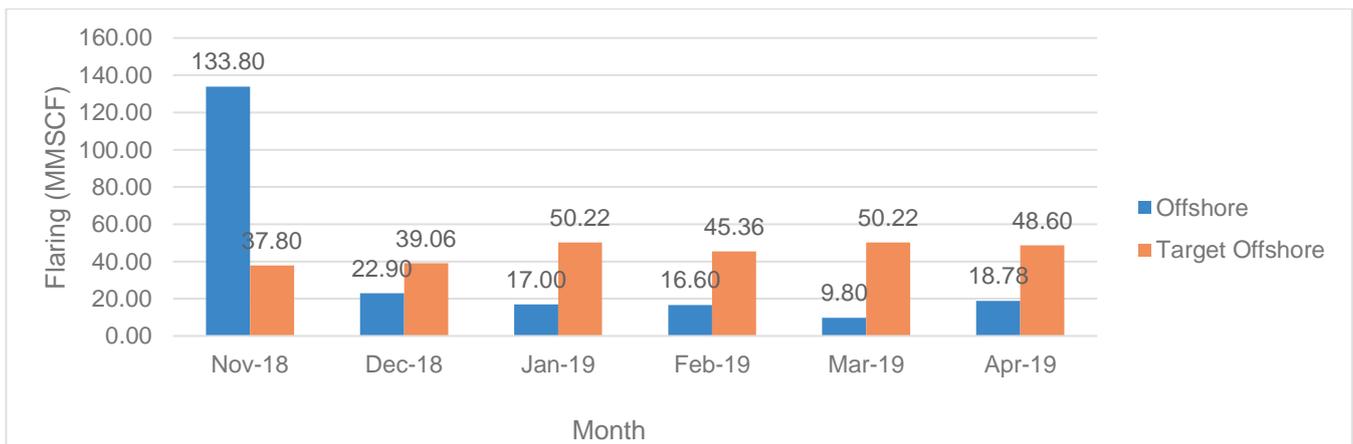


Figure 2 Offshore Flaring vs Target Flaring (November 2018 - April 2019)

The IESC raised with BP at the site visit in 2019 whether any efforts have been made, or are planned, to involve the local community in environmental monitoring events (e.g. air quality monitoring, water, noise, soil, etc.). BP indicated that due to HSSE concerns, community members have not been involved in environmental monitoring. It was noted, however, that representatives from SOCAR and the Ministry of Ecology are involved in various environmental monitoring activities.

5.1.4 Noise and Vibration

The IESC reviewed Report No. 001 – 2019 for both Onshore and Offshore Environmental Noise Monitoring. As noted in previous reports, baseline noise at all four nearby communities, Azim Kend, Sangachal, Umid and Massiv

⁴² SD2 Flaring and Actual Targets. January 2020.

3, was completed and reported in the ESIA. Ongoing monitoring has shown regular noise levels at nearby communities above the daytime criteria of 65 dB (LAeq). The cause of exceeding noise levels is attributed to a range of contributing sources including highway traffic on the Salyan Highway, the power stations, noise from electric cables on pylons, 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 (this Power Station was also identified by communities in the meeting attended by the IESC in 2019 as becoming increasingly noisy over the past few years).

The data presented in the Report covering this monitoring period for night time monitoring indicates that noise was within the set limits, barring one measurement where the noise level was in exceedance. The exceedance was reported for the Sangachal Village monitoring station, and the main source of noise was noted to be the Sangachal Power Station (consistent with previous monitoring in this area, and as noted above). In regard to the day time measurements, all measurements were reported within the set limits. Noise monitoring results are shared with MENR annually.

As the IESC has noted in previous monitoring reports, BP's community engagement prior to planned flaring has been consistently conducted. Communities are notified at least two weeks prior to planned flaring events (including as part of the commissioning of SD2). So far, there have been no grievances reported in relation to noise.

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 existing process water management system at ST and to dispose of treated water through re-injection offshore in the Azeri-Chirag-Guneshli (ACG) field using existing infrastructure. The volumes of PFW from SD2 production has been considerably lower than the estimates included in the ESIA. BP advised that the risk of not having sufficient capacity for SD2 PFW disposal is reduced, and SD2 PFW goes directly to the ACG PFW system at ST for re-injection to the gas field. SD2 PFW can be stored in the closed holding tank constructed as part of the SD2 expansion at the ST which will prevent any odour emissions. In addition, there is sufficient holding capacity within the lined pond system at ST should there be problems experienced with re-injection or if PFW volume was to increase.

With respect to hydrotest discharges during this monitoring period, BP reported to the IESC that there were planned discharges of hydrotest treated seawater in 2019 in accordance with SD2 ESIA⁴³. The IESC reviewed the Waste Disposal Register provided, including details of water quality and volumes.

As reported in the previous monitoring report, the final environmental close out report covering discharge volumes and toxicity results was submitted to MENR during in 2018.⁴⁴ The close-out report provides a summary of the discharges to sea during the SD2 pipeline pre-commissioning activities including the recorded dosage of

⁴³ SD2 CO3 Shah Deniz 2 Subsea Commissioning Support – Waste Disposal Register.

⁴⁴ Shah Deniz 2 Project Pipeline Pre-Commissioning Environmental Close-Out Report.

preservation chemicals and dye added during each activity and the results of the toxicity testing undertaken. This included toxicity testing of the pre-commissioning chemicals used; and toxicity testing of samples taken during each fill and discharge event. With regard to discharges during the pre-commissioning activities, in total approximately 294,940m³ of treated seawater was discharged to sea during these activities. This is 35% less than the estimated volumes that were included within the SD2 ESIA and 19% less than the revised estimated volume that was included within the SD2 Pipeline and Flowline Treated Seawater Discharges ETN. In addition, approximately 1,355m³ of potable untreated freshwater was discharged. In total discharge volumes were 33% less than estimated in the SD2 ESIA and 17% less than predicted in the SD2 Pipeline and Flowline Treated Seawater Discharges ETN. This was primarily due to the contingency volumes that were included within the discharge estimates in the event that additional tests may be required for operational reasons. Further, the Operator reports that the close out report for North Flank and West Flank flowlines was submitted to MENR in the first quarter of 2019.

5.2 Biodiversity Conservation and Ecological Management

The monitoring of flora and fauna associated with the nearshore and wetland environments at ST has continued since the late 1990's. The biological monitoring program has been subject to changes in response to data analysis. These changes are reviewed by an independent review committee and the MENR. The results of the monitoring programme for the period subject to this review were noted to be available in August 2019 as part of the BP 22-Year Environmental Monitoring Surveys Report, however the IESC is advised that this is currently in the process of printing and will be shared once it is publicly available later in 2020.

The land area adjacent to ST that was used temporarily during the SD2 onshore construction has been subject to restoration works including removal of contaminated soils and re-vegetation. Concrete pads have been left in-site for future use as approved by the MENR.

5.3 Worker Health and Safety

Since the IESC last visited the Project in late April 2019, there was a fatality on 7th May related to a fire onboard the PLBH pipelaying vessel. During the repair of an Injection Moulded Polypropylene Machine (IMPP) a flash fire occurred in station 7 on the PLBH Firing Line. Fourteen crew members were injured to varying degrees. Emergency response and medevac was activated and all injured personnel were sent ashore for medical treatment. The incident is still under investigation. Details provided to the IESC highlight a suitable immediate response to the incident and a risk based approach to the task where the incident occurred which is commended, particularly the "Go-No-Go" approach to undertaking the task again based on review, risk assessment and the incident investigation. The IESC were also provided an overview of causes and associated actions, both from the contractors and from BP. The detail provided highlights a high level and detailed investigation has taken place and suitable actions have been implemented.⁴⁵ What remains to be ascertained is that the assurance by BP is implemented and this will be assessed at the next site visit. The IESC has relied on data and Operator reporting in

⁴⁵ IMCA Safety Flash 11/19 (May 2019). Fatality and multiple injuries – flash fire onboard pipe-lay barge; IMCA Safety Flash 24/19 (October 2019). Update to SF 11/19: Fatality and multiple injuries – flash fire onboard pipe-lay barge; BP. Marine Vessel Incident Learning. Confidential (provided to IESC on 20 February 2020); and BP. SD2 Flowline Installation Update (in relation to Pipelay Incident). 13 June 2019.

regard to offshore environmental and social performance monitoring and has not conducted offshore monitoring due to safety and security concerns (both of IESC and working personnel) and stringent training requirements which have to be conducted and successfully completed prior to visiting the offshore site.

Up to this monitoring period, the SD2 Project maintained safety standards, consistent with the requirements of GIIP delineated by ADB SPS, EBRD and IFC performance standards and guidelines, among others⁴⁶, including during the construction phase of the SD2 Project and through the transition to operations in 2018. The Project's overall 12-month Total Recordable Injury Rate (TRIR), as of December 2019) was 0.83⁴⁷, which is higher than the relevant industry standards established by the International Association of Oil and Gas Producers (IOGP), which is 0.56, and the International Pipeline and Offshore Contractors Association (IPLOCA), which is 0.24 (IOGP and IPLOCA data have been normalised to 200,00 as per BP practice). This jump is attributed to the significance incident that occurred onboard the PLBH during the monitoring period, including a fatality and associated injuries.

Disaggregating these numbers, during the monitoring period, in addition to the fatality that occurred, there was one High Potential (HIPO) incident, 13 DAFWCs, and 15 recordable injuries reported. The HIPO reported involved a passenger bypassing a hard barrier and using the incorrect access to board a helicopter. The DAFWCs and 14 of the 15 recordable injuries were associated with the incident onboard the PLBH.

Drilling HSE statistics are reported separately, and there were no DAFWCs, or fatalities during the monitoring period. There were 2 HIPOs, and one recordable injury for the drilling and subsea campaigns during the reporting period. The recordable injury occurred onboard the Istiglal MODU whereby a Load Handler's lower body was caught between the surge tank's frames.⁴⁸

During the 2019 site visit, the IESC observed a strong safety culture at the ST, where the SD2 operations are fully incorporated within the wider ST operations. 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 continuing excellent safety performance for this monitoring period.

⁴⁶ Including the World Bank Group Environmental, Health, and Safety Guidelines for Offshore Oil and Gas Development; and the General EHS Guidelines.

⁴⁷ SD2 Partner Monthly Reports. December 2019.

⁴⁸ *Ibid.*

Appendix A Evidence List

Evidence List

File or Information Title
Evidence List: 2019 / 2020
AGT. SDF03 & SDF04 Top Hole. Drilling End of Well Report. December 2019.
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