#### 環境チェックレポート

- (1) プロジェクト名 石油精製・石油化学プラントの増改修プロジェクト
- (2) 実施場所 インド国 グジャラート州、ダドラ及びナガル・ハヴェリ共同連邦直轄地
- (3) プロジェクト概要 石油精製・石油化学プラントの増改修プロジェクト
- (4)カテゴリ分類カテゴリB
- (5) カテゴリ分類の根拠

本事業は、環境ガイドラインに掲げる影響を及ぼしやすいセクターに該当せず、影響を及ぼしやすい特性を持たず、また影響を受けやすい地域あるいはその近傍に立地せず、環境への望ましくない影響は重大でないと判断されるため。

(6) 環境許認可

同国制度に基づき EIA が作成され、2011 年6月に同国環境森林省より承認を取得済である。

- (7) 汚染対策 大気質、騒音・振動の計画値は現地基準を満たす計画である。
- (8) 自然環境面

本件サイトは、同国で指定している保護区には立地せず、またその周辺に特に留意すべき地域はなく、また本件サイト内に希少種等は存在しない。

- (9) 社会配慮面 本件に伴う住民移転は発生せず、特段社会面で配慮すべき事項はない。
- (10)適用国際基準世界銀行・セーフガードポリシー

### (11) その他・モニタリング

上記環境レビューを踏まえ、許認可の取得状況、大気質及び騒音・振動についてモニタリングを実施する予定。

以上

Q1.	Please pro	ovide the address of the project si	te.			
	Address o	f the project site: Dahej, Gujara	t in Ind	lia.		
Q2. Settir	Please pro	ovide brief explanation of the pro 'A and PET plant with capacity o	ject. <u>f 2.3 N</u>	//TPA and 648 KTA 1	respective <u>ly.</u>	
infor	m of strong	loan be applied to a new project g claims by stakeholders such as ruction work / operations, from en	local	residents, as well as	n case of an executing pri improvement guidance	oject, please or cessation
	□ New P	=		Executing Project (	•	
	■ Execut	ing Project (without Claim etc.)		Others (Please spe	cify	)
Q4. or reg EIA.	In case of gulations of	this project, is it necessary to exe the country where the project is	cute Ei to be ii	nvironmental Impact mplemented? If nec	Assessment (EIA) based essary, please inform the	l on the laws progress of
<b>!</b>	■ Require □ Not Re	ed (completed ) c quired	□ Red	quired (under execution Others (Please spec	on or under planning) ify	)
envir	onmental a	at EIA is already completed, pleassessment system of the country d, please provide the date and nar	where	the project is to be in	nplemented or not. If I	based on the EIA report is
0		ed (without condition) approval process	_ _	Approved (condition Others (Please special		)
Site L	ocation	Authority			Approval Date	
Dahej		State Level Environment Impa Gujarat	act As	sessment Authority,	June 23, 2011	
<b>Q6.</b> Have	If enviro	nmental permit(s) other than EI ed required permit(s)?	A is re	equired, please provi	ide the name of require	d permit(s).
	□ Obtaine ■ Not req		_ _	Required, but not ob Others (Please speci		)
Na	me(s) of re	quired permit(s):		·		
Q7. machi loan a	Will the lo inery that h greement)	oan be used for the undertaking th as no relation with specific projec	at can ct, or T	not specify the projec wo Step Loan that can	et at this stage (e.g. exponent anot specify the project a	rt or lease of t the time of
(	( <del>¥es</del> / No)					

If you answered "Yes", it is not necessary to reply to the following questions. If you answered "No", please reply to the following questions.

Q8.	Are ther	e any environmentally sen	sitive area shown below in and	around project site?
	( <del>Yes</del> /1	No)		
		d "Yes", please select app d "No", please reply to qu	licable items by marking, and r estions 9 and after.	eply to following questions.
		minorities or indigenous Primeval forests, tropical Ecologically important had Habitats of endangered spagreements. Areas that have risks of language of the description areas Areas with special values	populations, heritage sites, etc. natural forests abitats (coral reefs, mangrove, pecies of which protection is rearge scale increase in soil salings from archaeological, historical	tidal flats, etc.) quired under local laws and international ity or soil erosion
Q9.	Does the	project involve following	characteristics?	
	( <del>Yes</del> / N	0)		•
after.		ed "Yes", please describe t d "No", please reply to qu		ristics, and reply to the questions 10 and
	(2) Pu (3) La	voluntary resettlement mping of groundwater nd reclamation, developm eforestation	(Number of resettlers: (Scale: ent and/or clearing (Scale: (Scale:	) m³/year) ha) ha)
		do the applicable characte		ne country where the project is to be d their scale serve as basis for executing
	They do Others (	Please specify	□ They do not )	
	equal or			al project cost, or the total amount of JBIC pport for a past project, this shall be the
	(Yes/≩	<del>vo</del> )		
		ed "Yes", it is not necessar ad "No", please reply to qu	y to reply to the following ques estions 12 and after.	itions.

Q12. Does the project belong to either of the sectors that impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights and interests without additional capital investment)?

If you	answ	/ No) vered "Yes", it is not necessary to reply to following questions. vered "No", please reply to the questions 13 and after.
Q13.	Do	es the project belong to the following sectors?
	(Yes	/ No)
		rered "Yes", please specify the sector by marking, and reply to questions 14 and after. rered "No", it is not necessary to reply to the following questions.
	(1) (2) (3) (4) (5) (6) (7) (8)	Mining Oil and natural gas development Pipelines Iron and steel (projects that include large furnaces) Non-ferrous metals smelting and refining Petrochemicals (manufacture of raw materials; including complexes) Petroleum refining Oil, gas and chemical terminals
	(9) (10)	Paper and pulp  Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.

☐ (11) Thermal power ☐ (12) Nuclear power

(16) Airports

(21) Forestry

(17) Ports and harbors

vicinity

☐ (13) Hydropower, dams and reservoirs

(15) Roads, railways and bridges

(19) Waste management and disposal

☐ (22) Tourism (construction of hotels, etc.)

logging or submarine electrical cables

(20) Agriculture involving large-scale land-clearing or irrigation

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, pleased explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

(14) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale

(18) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their

Q1. Please provide the address of the project site.			
Address of the project site: Hazira, Gujarat	n India.	· 	
Q2. Please provide brief explanation of the projecting up PBR and SBR plant with capacity of 190			
Q3. Will JBIC loan be applied to a new project or inform of strong claims by stakeholders such as le orders for construction work / operations, from env	ocal residents, as well as		
<ul><li>□ New Project</li><li>■ Executing Project (without Claim etc.)</li></ul>	☐ Executing Project (☐ Others (Please spe	·	)
Q4. In case of this project, is it necessary to executor regulations of the country where the project is to EIA.			
■ Required (completed) □ Not Required	Required (under execution Others (Please spec		) .
Q5. In case that EIA is already completed, please environmental assessment system of the country w already approved, please provide the date and name	here the project is to be in	nplemented or not. If I	
<ul><li>Approved (without condition)</li><li>Under approval process</li></ul>	☐ Approved (condition Others (Please spec		)
Site Location Authority		Approval Date	$\neg$
Hazira State Level Environment Impa Gujarat	ct Assessment Authrity,		&
Q6. If environmental permit(s) other than EIA Have you obtained required permit(s)?	is required, please provi	ide the name of require	ed permit(s).
<ul><li>□ Obtained</li><li>■ Not required</li></ul>	□ Required, but not o □ Others (Please spec		)
Name(s) of required permit(s):			
Q7. Will the loan be used for the undertaking tha machinery that has no relation with specific project loan agreement)?			
( <del>Yes</del> / No)		,	
If you answered "Yes", it is not necessary to reply If you answered "No", please reply to the following		<b>.</b>	

Q8.	Are there any environmentally sensitive area shown below in and around project site?
	( <del>Yes</del> /No)
-	answered "Yes", please select applicable items by marking, and reply to following questions. I answered "No", please reply to questions 9 and after.
	<ul> <li>□ (1) National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)</li> <li>□ (2) Primeval forests, tropical natural forests</li> <li>□ (3) Ecologically important habitats (coral reefs, mangrove, tidal flats, etc.)</li> <li>□ (4) Habitats of endangered species of which protection is required under local laws and international agreements.</li> <li>□ (5) Areas that have risks of large scale increase in soil salinity or soil erosion</li> <li>□ (6) Desertification areas</li> <li>□ (7) Areas with special values from archaeological, historical and/or cultural viewpoints</li> <li>□ (8) Habitats of minorities, indigenous populations, nomadic people with traditional life style, or areas with special social value</li> </ul>
Q9.	Does the project involve following characteristics?
	( <del>Yes</del> /No)
after.	u answered "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and answered "No", please reply to questions 11 and after.
	(1) Involuntary resettlement (Number of resettlers: ) (2) Pumping of groundwater (Scale: m³/year) (3) Land reclamation, development and/or clearing (Scale: ha) (4) Deforestation (Scale: ha)
	Under the environmental impact assessment system of the country where the project is to be emented, do the applicable characteristics from $(1) - (4)$ above and their scale serve as basis for executing A for the project?
0	They do
	Will JBIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC equal or less than SDR 10 million? (In the case of additional support for a past project, this shall be the nulated total amount)
	(Yes / <del>No</del> )
	u answered "Yes", it is not necessary to reply to the following questions. u answered "No", please reply to questions 12 and after.

Q12. Does the project belong to either of the sectors that impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights and interests without additional capital investment)?

If you	answ	/ No) rered "Yes", it is not necessary to reply to following questions. rered "No", please reply to the questions 13 and after.
Q13.	Do	es the project belong to the following sectors?
(	Yes	/ No)
		ered "Yes", please specify the sector by marking, and reply to questions 14 and after. ered "No", it is not necessary to reply to the following questions.
	(4) (5) (6) (7) (8) (9) (10) (11) (12)	Mining Oil and natural gas development Pipelines Iron and steel (projects that include large furnaces) Non-ferrous metals smelting and refining Petrochemicals (manufacture of raw materials; including complexes) Petroleum refining Oil, gas and chemical terminals Paper and pulp Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc. Thermal power Nuclear power Hydropower, dams and reservoirs
<u> </u>	(14)	Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
	(15)	Roads, railways and bridges

☐ (16) Airports

☐ (21) Forestry

(17) Ports and harbors

(19) Waste management and disposal

☐ (22) Tourism (construction of hotels, etc.)

(20) Agriculture involving large-scale land-clearing or irrigation

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, pleased explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

(18) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their

Q1. Please	provide the address of the project sit	e.				,	
Addre	s of the project site: Jamnagar, Guja	ırat in	India.				
Setting up o LDPE and L	provide brief explanation of the proj Petcoke Gasification plant, Refiner LDPE, Paraxylene plant, Acetic Acid	y Off l and I	<u>IPIB pla</u>	<u>nt.</u>			
inform of st	BIC loan be applied to a new project of ong claims by stakeholders such as instruction work / operations, from en	local	residents	, as well as			
	v Project cuting Project (without Claim etc.)			ing Project (v (Please spec	vith Claim et cify	c.)	)
	of this project, is it necessary to exect sof the country where the project is t						
	uired (completed )			nder executio (Please speci	on or under p	lanning)	).
environment	e that EIA is already completed, plea al assessment system of the country oved, please provide the date and name	where	the proje	ect is to be in	aplemented o		
	proved (without condition) fer approval process	0		ed (condition (Please speci			)
Site Locatio					Approval D		<b>]</b> .
Jamnagar	Ministry of Environment & For	ests		····	March 30 October 18	, 2010 & ,2011	t _
	vironmental permit(s) other than EL tained required permit(s)?	A is r	equired,	please provi	de the name	of required	l permit(s).
	ained required			ed, but not ob (Please speci			
Name(s)	f required permit(s):						
	ne loan be used for the undertaking that has no relation with specific projectort)?						
( <del>Yes</del> /	No)						
	red "Yes", it is not necessary to reply red "No", please reply to the followi			ng questions			

<b>Q8.</b> Ar	re there	e any environmentally sensitive area shown below in and around project site?
(¥	<del>es</del> /N	4o)
		d "Yes", please select applicable items by marking, and reply to following questions. d "No", please reply to questions 9 and after.
	(2) (3) (4) (5) (6)	National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)  Primeval forests, tropical natural forests  Ecologically important habitats (coral reefs, mangrove, tidal flats, etc.)  Habitats of endangered species of which protection is required under local laws and international agreements.  Areas that have risks of large scale increase in soil salinity or soil erosion  Desertification areas  Areas with special values from archaeological, historical and/or cultural viewpoints  Habitats of minorities, indigenous populations, nomadic people with traditional life style, or areas with special social value
<b>Q9.</b> Do	oes the	project involve following characteristics?
( <del>¥</del> €	es-/ No	0)
after.		d "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and d "No", please reply to questions 11 and after.
	2) Pu: 3) La:	woluntary resettlement (Number of resettlers: ) mping of groundwater (Scale: m³/year) nd reclamation, development and/or clearing (Scale: ha) eforestation (Scale: ha)
impleme	nted, o	r the environmental impact assessment system of the country where the project is to be do the applicable characteristics from $(1) - (4)$ above and their scale serve as basis for executing project?
	ney do Thers (I	They do not Please specify )
loan equ	ıal or l	BIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC less than SDR 10 million? (In the case of additional support for a past project, this shall be the stal amount)
(Y	es / ¥	<del>lo</del> )
		d "Yes", it is not necessary to reply to the following questions. d "No", please reply to questions 12 and after.

Q12. Does the project belong to either of the sectors that impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights and interests without additional capital investment)?

(Yes/No)

If you answered "Yes", it is not necessary to reply to following questions. If you answered "No", please reply to the questions 13 and after.

Q13. Does the project belong to the following sectors?

(Yes/No)

If you answered "Yes", please specify the sector by marking, and reply to questions 14 and after. If you answered "No", it is not necessary to reply to the following questions.

	(1)	Mining
	(2)	Oil and natural gas development
	(3)	Pipelines
	(4)	Iron and steel (projects that include large furnaces)
	(5)	Non-ferrous metals smelting and refining
	(6)	Petrochemicals (manufacture of raw materials; including complexes)
	(7)	Petroleum refining
	(8)	Oil, gas and chemical terminals
	(9)	Paper and pulp
	(10)	Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
	(11)	Thermal power
	(12)	Nuclear power
	(13)	Hydropower, dams and reservoirs
	(14)	Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale
_		logging or submarine electrical cables
		Roads, railways and bridges
	(16)	Airports
	(17)	Ports and harbors
	(18)	Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their
_		vicinity
	, ,	Waste management and disposal
Ц		Agriculture involving large-scale land-clearing or irrigation
	• •	Forestry
	(22)	Tourism (construction of hotels, etc.)

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, pleased explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

Q1.	Please pro	vide the address of the project site.	•			
	Address of	f the project site: Silvassa, Union	Terri	itory of Dadra and Na	gar Haveli in India.	
Q2. Settin		vide brief explanation of the project Y and PTY plants with capacity of		KTA and 140 KTA re	spectively	
infor	m of strong	loan be applied to a new project or claims by stakeholders such as louction work / operations, from env	ocal	residents, as well as i		
	□ New Pr ■ Executi	oject ng Project (without Claim etc.)		Executing Project (w Others (Please spec		)
Q4. or reg EIA.		this project, is it necessary to executhe country where the project is to				
<b>!</b>	Require Not Rec	d (completed )		quired (under executio Others (Please speci		),
envir	onmental as	at EIA is already completed, please ssessment system of the country w i, please provide the date and name	here	the project is to be im	plemented or not. If E	
		ed (without condition) approval process	0	Approved (condition Others (Please speci		)
Site I	ocation	Authority			Approval Date	
Silva	ssa	Ministry of Environment & Fore	sts		June 08, 2011	<u> </u>
		nmental permit(s) other than EIA ed required permit(s)?		equired, please provid	-	d permit(s).
1	<ul><li>Not req</li></ul>	uired		Others (Please speci	fy	)
Na	me(s) of re	quired permit(s):				•
		oan be used for the undertaking tha as no relation with specific project, ?				
	( <del>Yes</del> / No)					
		"Yes", it is not necessary to reply				
II you	ı answered	"No", please reply to the following	g que	estions.		

Qo.	Ate mer	e any environmentarry sensitive area shown below in and around project site?
	( <del>Yes-</del> /1	No)
		ed "Yes", please select applicable items by marking, and reply to following questions. ed "No", please reply to questions 9 and after.
	□(1) □(2) □(3) □(4) □(5) □(6) □(7) □(8)	National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)  Primeval forests, tropical natural forests  Ecologically important habitats (coral reefs, mangrove, tidal flats, etc.)  Habitats of endangered species of which protection is required under local laws and international agreements.  Areas that have risks of large scale increase in soil salinity or soil erosion  Desertification areas  Areas with special values from archaeological, historical and/or cultural viewpoints  Habitats of minorities, indigenous populations, nomadic people with traditional life style, or areas with special social value
Q9.	Does the	e project involve following characteristics?
	( <del>Yes</del> /N	·o)
after.		ed "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and "No", please reply to questions 11 and after.
,	☐ (2) ☐ (3)	Involuntary resettlement (Number of resettlers: )  Pumping of groundwater (Scale: m³/year)  Land reclamation, development and/or clearing (Scale: ha)  Deforestation (Scale: ha)
_		or the environmental impact assessment system of the country where the project is to be do the applicable characteristics from $(1) - (4)$ above and their scale serve as basis for executing project?
0	They do Others (	They do not Please specify )
	equal or	BIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC less than SDR 10 million? (In the case of additional support for a past project, this shall be the otal amount)
	( <del>¥es</del> /1	No)
		ed "Yes", it is not necessary to reply to the following questions. ed "No", please reply to questions 12 and after.
no	t anticipa	the project belong to either of the sectors that impact on the environment is deemed immaterial or is ated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary project, acquisition of rights and interests without additional capital investment)?

(<del>Yes</del> / No)

If you answered "Yes", it is not necessary to reply to following questions. If you answered "No", please reply to the questions 13 and after.

Q13. Does the project belong to the following sectors?

(Yes / No)

If you answered "Yes", please specify the sector by marking, and reply to questions 14 and after. If you answered "No", it is not necessary to reply to the following questions.

ш	(1)	Mining
	(2)	Oil and natural gas development
	(3)	Pipelines
	(4)	Iron and steel (projects that include large furnaces)
	(5)	Non-ferrous metals smelting and refining
	(6)	Petrochemicals (manufacture of raw materials; including complexes)
	(7)	Petroleum refining
	(8)	Oil, gas and chemical terminals
	(9)	Paper and pulp
	(10)	Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
	(11)	Thermal power
	(12)	Nuclear power
		Hydropower, dams and reservoirs
	(14)	Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
	(15)	Roads, railways and bridges
	(16)	Airports
	(17)	Ports and harbors
	(18)	Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity
	(19)	Waste management and disposal
	(20)	Agriculture involving large-scale land-clearing or irrigation
	(21)	Forestry
	(22)	Tourism (construction of hotels, etc.)

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, pleased explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

The project is to establish a plant capacity of 395KTA for PFY and capacity of 140KTA for PTY in the land area of 37,370 m² and plant & utility buildings in 183,882 m². The plant will utilize Raw materials of PTA (78MT/Hr), MEG(30MT/Hr), Antistatic Oil(2.4MT/Hr), Spin Finish Oil(0.6MT/Hr) and Titanium Dioxide(0.23MT/Hr) and utilizes Water (from the nearby Damanganga Canal distributary) of 13,552KLD and requires Power capacity of 136,250kVA and Natural gas -0.7MMSCM/Day-Max, LSHS-200TPD.

There are storage capacities for the plant of 4,643.4MT and does not exceed 200thousand MT for storage capacity.

The EIA report for Silvassa, as required by the host country, has already been provided.