

Safeguards Monitoring Report

Semiannual Report
November 2017

Regional: Greater Mekong Subregion: Livelihood Support for Corridor Towns – Cambodia Component

Prepared by the Advancing Engineering Consultants, Ltd. for the Asian Development Bank.

NOTE

- (i) In this report, "\$" refers to US dollars.

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SAFEGUARD MONITORING REPORT (DRAFT)

1. Introduction and Project Overview

Project Number and Title:	Battambang Night Market ADB-Grant 9173
Safeguard Category:	Environment
Reporting period:	August 17 th , 2017 – October 20 th , 2017
Last report date:	N.A.
Key sub-project activities since last report:	Activities of Proponent: N/A Progress of Work: 15% Changes of Surrounding Environment: No significant change (one mango tree and several young Frangipani had been removed from the site) Status of Permits / Consents: N/A
Report prepared by:	Lichhay Kleoung
Report checked by:	Sona Seng

The Environment monitoring assessment plan (EMAP) is aimed at minimizing the environmental impacts which may occur during the Battambang Night Market construction process in Battambang province. While doing environmental inspections on site, the site engineer has completed an environmental site inspection checklist, in accordance with the Initial Environmental Examination (IEE), which is required by the Asian Development Bank. Moreover, immediate actions have been implemented to prevent potential impacts to the environment by instructing, advising and giving comments to Khmer Decor Construction Company or directly to the workers.

2. Environmental Performance Monitoring

a. Summary of Compliance with EMAP Requirements (Environmental Performance)

Project phase	Project activity	Potential environmental impacts	Proposed mitigation measures	Institutional responsibilities		Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
				Implement	Supervise			
Construction	Earthworks, site clearing, hauling of construction materials	1. Dust/suspended particles generation from - Earthworks - Stockpile of fine aggregates, sand, cement - Transport of aggregates, cement for disposal, and wastes - Movements of construction vehicles/equipment	1.1. Strictly implement dust control measures such as periodical water spray.	Contractor	PMU/PIU/ESO/ADB*	Partial	Trucks are not completely clean before leaving site.	Contractor (KDC) must check trucks before allowing them to leave the site.
			1.2. The contractor shall maintain construction equipment in adequate working condition.			Yes		
			1.3. The driver of construction vehicles must comply with speed limits to minimize road dust.			Partial		
			1.4. Prepare and strictly implement a traffic management plan around construction site.			Partial		
		2. Noise and vibration	2.1. Construction works with heavy noise and vibration shall be prohibited during the night (09:00 pm–6:00 am) to avoid noise disturbance in surrounding areas.	Contractor	PMU/PIU/ESO/ADB*	Yes		KDC must limit the truck speed.
			2.2. Select quiet equipment and working methods as much as possible.			Yes		
			2.3. Provide prior notification to the local community on schedule of construction activities.			Yes	KDC needs to instruct to truck drivers on the speed limit construction site	KDC should have strong measure to limit vehicle speed outside construction site

Project phase	Project activity	Potential environmental impacts	Proposed mitigation measures	Institutional responsibilities		Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
				Implement	Supervise			
		3. Water pollution	3.1. Strictly control waste oil and other waste. 3.2. The contractor will be prohibited from washing construction tools along the river to prevent further pollution. 3.3. The wastewater septic tank facility in the workers' camp and/or other necessary locations shall be properly maintained.	Contractor	PMU/PIU/ ESO/ ADB*	Partial Yes Yes	No proper fuel filling methods to avoid leakages.	Should use proper funnel when refueling the trucks.
		4. Soil pollution	4.1. Diesel and waste oil shall be handled and stored carefully to prevent leakages or spills. Waste oil shall be collected and stored in drums, and disposed of at a site approved by the local authority, and raised off the ground, and covered to keep rain out and surrounded by a bund to contain spills and simplify clean-up operations.	Contractor	PMU/PIU/ ESO/ ADB*	Partial		KDC must clean up leaked oil on soil immediately and prevent future leakage from machinery and equipment. Waste oil must be kept in proper containers.

Project phase	Project activity	Potential environmental impacts	Proposed mitigation measures	Institutional responsibilities		Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
				Implement	Supervise			
		5. Waste	5.1. Prepare and strictly implement a proper waste management plan. 5.2. The waste management plan should be approved by the local authority in advance of construction works. 5.3. The contractor shall provide temporary sanitation facilities such as portable toilets and garbage bins to ensure that domestic wastes generated by construction personnel are well managed. 5.4. Office building for the contractor shall be provided with toilets and septic tanks to handle domestic sewage.	Contractor	PMU/PIU/ESO/ADB*	Partial Yes Yes Yes		KDC to train workers about waste disposal. Additional rubbish bins are installed at worker camp and construction site on October 30, 2017.
		6. Accidents of construction workers	6.1. The contractor shall comply with the implementation plan and secure working conditions.	Contractor	PMU/PIU/ESO/ADB*	Partial	Not enough masks for workers during polishing and spray paint.	KDC to supply adequate PPE to workers and ensure the enforcement of wearing.

b. Issues for Further Action

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Reports (N.A.)			
New Issues from This Report			
No speed limit	To limit the speed of dump trucks on the construction site and on public streets.	AE/KDC to report on this matter twice a month to relevant authority.	KDC shall instruct to all truck drivers on speed limitspeed limit.
Waste disposal	To maintain a continual awareness of site cleanliness.	KDC to maintain waste management properly.	KDC to talk about waste disposal during meetings with workers on site. Train workforce in appropriate techniques and practices to avoid and minimize impacts of oil spills and provide materials and training for clean-up

3. Occupational, Health and Safety (OHS) Performance Monitoring

a. OHS for worker

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Reports (N.A.)			
New Issues from This Report			
Safety practice: Not enough masks worn while spray painting and during cement debagging process.	To provide safety masks to workers who work in dusty conditions and other harmful conditions.	KDC / Daily task	KDC must make sure there are enough required safety tools and check if workers maintain good safety practices. Strengthen health and safety practices during all civil works activities to avoid risk of accident and injuries
No safety kit	First-aid kit is required.	KDC / ASAP	KDC must acquire a safety kit for site office as soon as possible.
Safety signs	Place safety signs where required.	AE/KDC must verify that safety signs are consistently visible.	AE will report about site safety issues (if found). KDC to take action immediately to solve the reported problems.

b. Public Safety

Issue	Required Action	Responsibility and Timing	Resolution
Old Issues from Previous Reports (N.A.)			
New Issues from This Report (N.A.)			

4. Grievance Redress Mechanism

Street vendors near the construction site are interviewed by AE engineer and reported that no disturbance or negative impacts during the construction to the business.

Summary:

- ▯ Number of new grievances, if any, since last monitoring period: 00
- ▯ Number of grievances resolved: 00
- ▯ Number of outstanding grievances: 00

Type of Grievance	Details (Date, person, address, contact details, etc.)	Required Action, Responsibility and Timing	Resolution
Old Issues from Previous Reports (N.A.)			
New Issues from This Report (N.A.)			

2. Conclusion

During site inspection of the first quarter, the Contractor have done good environmental practice during the first construction phase. However, AE have found out some issues which required immediate actions such as lack of rubbish bin, speed limit of the trucks, PPE for workers and oil spills and leakages. However, KDC has implemented some corrective measures as per instruction from CS engineer such as additional rubbish bins at worker camp site and in the construction site, first aid kit at the KDC office, and some masks, gloves and boots. Nevertheless, KDC has to strengthen health and safety practice during civil work activities to avoid risk of accident and injuries (roofing activities). In addition, waste management needs to be improved i.e. collection and disposal of debris from demolition of existing building from construction site to the licenses dumping site. Lastly, KDC shall instruct on the speed limitation to all truck drivers and shall strictly enforced.

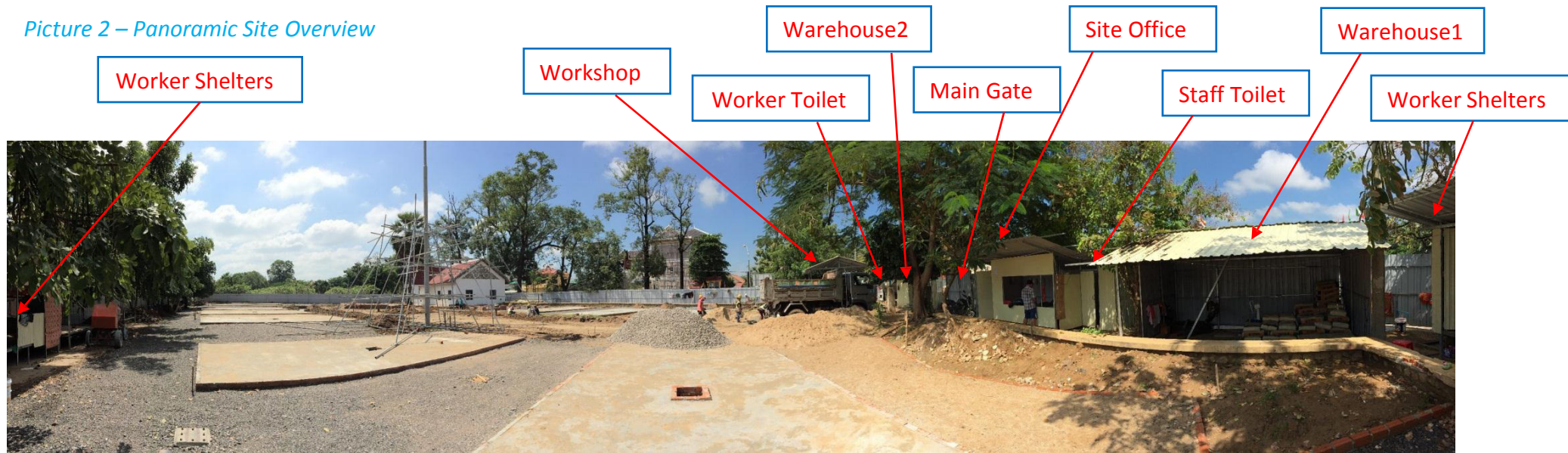
3. Attachments

- Photographs

Picture 1 – 2.2m Height Fences Around Construction Site



Picture 2 – Panoramic Site Overview



Picture 3 – Operating Tools at Construction Site



Picture 4 – Safety Signage and Tools



- Environmental Site Inspection Checklist #1 dated September 29, 2017
- Environmental Site Inspection Checklist #2 dated October 13, 2017



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ENVIRONMENTAL SITE INSPECTION CHECKLIST

Checklist No. : 01

Project : Battambang Night Market Site Location : Battambang Province

Construction stage / status during inspection : old part scrubbing / Soil Preparation for compaction

Inspection Date : 29.09.2018 Inspection Time : 9:45 AM

Inspected by : i-lC1J. k oec Weather : /I...uA.IIU

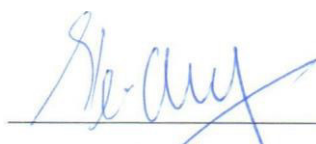
Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
1. Air Pollution Control				
1.1. Are the construction sites watered to minimize dust generated?	<input checked="" type="checkbox"/>			
1.2. Are stockpiles of dusty materials (size with more than 20 bags cement covered or watered?	<input checked="" type="checkbox"/>			
1.3. Cement debagging process undertaken in sheltered areas		<input checked="" type="checkbox"/>		<u>Y tti;t;cki"Q.re</u>
1.4. Are all vehicles carrying dusty loads covered/watered over prior to leaving the site?	<input checked="" type="checkbox"/>			
1.5. Are demolition work areas watered? (e.g. trimming activities by using breaker)	<input checked="" type="checkbox"/>			
1.6. Are dusty roads paved and/or sprayed with water?		<input checked="" type="checkbox"/>		<u>N rs eqh(VrettV-t 1Mpttd--</u>
1.7. Are dust controlled during percussive drilling or rock breaking?		<input checked="" type="checkbox"/>		<u>(\.)O {./\ J ((iCLU.- <jl/v"</u>
1.8. Are plant and equipment well maintained? (any black smoke observed, please indicate the plant/equipment and location)	<input checked="" type="checkbox"/>			
1.9. Is dark smoke controlled from plant?	<input checked="" type="checkbox"/>			
1.10. Are there enclosures around the main dust-generating activities? (e.g. grout mixing)		<input checked="" type="checkbox"/>		<u>.fc.K <f,OV- l<?"i.>rJ.u.tcvl ctXe"-.</u> <u>IV.< <f.r')vC<rl-ic.cv4- ();SF 'f"-fa..d- 5</u>
1.11. Hoarding (not <2.5m) provided along boundaries and properly maintained (any damage / opening observed, please indicate the location) .	<input checked="" type="checkbox"/>			
1.12. Are speed control measures applied? (e.g. speed limit sign)	<input checked="" type="checkbox"/>			
1.13. Others (please specify)				

Inspection Items	Implemented?		N/A	Remarks
	Yes	No *		
2. Water Pollution Control				
2.1. Are water discharge licenses valid?			✓	
2.2. Are conditions of the license complied with? (check the monitoring records and observe physically)			-/	
2.3. Are wastewater treatment system being used and properly maintained on site? (e.g. desilting tank)	/			
2.4. Are there any wastewater discharged to the storm drains? Is the wastewater being treated?	;			CCJYIBTiL.L.Gtr ptLV7" t..b\..- 1,0-M-Jle .L)LtM Ar.t'A
2.5. Are measures provided to properly direct effluent to silt removal facilities? (e.g. provide earth bunds / U-channels)			✓	
2.6. Are u-channels and manholes free of silt and sediment?			V'	
2.7. Are sedimentation traps and tanks free of silt and sediment?	vi'		V	
2.8. Are all manholes on-site covered and sealed?			/	
2.9. Are sandbags/earth bund adopted to prevent washing away of sand/silt and wastewater to drains, catch pit, public road and footpath?			/	
2.10. Are vehicles and plants cleaned before leaving the site?		/		(A c.l-h cGILLc IVIV V-kK\..
2.11. Are wheel washing facilities well maintained to prevent overflow flooding sediment?			/	
2.12. Is sand and silt settled out in wheel washing bay and removed?			/	
2.13. Is the public road/area around the site entrance and site hoarding kept clean and free of muddy water?	V			
2.14. Is domestic water directed to septic tanks or chemical toilets?	V			
2.15. Others (please specify)				
3. Noise Control				
3.1. Do air compressors and generators operate with doors closed?	/			fV":l.9 OAA STVlalt Cu-t f n;
3.2. Is idle plant/equipment turned off or throttled down?	/			
3.3. Do air compressors and hand-held breakers have valid noise emission labels (NEL)?			✓	
3.4. Any noise mitigation measures adopted (e.g. use noise barrier / enclosure)?	/			

Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
3.5. Are silenced equipments utilized?	/			
3.6. Others (please specify)				
4. Waste Management				
4.1. Is the site kept clean and tidy? (e.g. litter free, good housekeeping)	/			
4.2. Are separate chutes used for inert and non-inert wastes?			/	
4.3. Are separated labelled containers / areas provided for facilitating recycling and waste segregation?		v		Nk:"> c()n-tr Q..(,s r r.ztjc:.la.V WUJt.12-.
4.4. Are construction wastes / recyclable wastes and general refuse removed off site regularly?				(\o (); lohle " M£4 ,1/Vv)f,J
4.5. Are construction wastes collected and disposed of properly by licensed collectors?	/			
4.6. Are chemical wastes, if any, collected and disposed of properly by licensed collectors?				
4.7. Does chemical waste producer license covers all major chemical wastes produced on site?				
4.8. Are chemical wastes properly stored and labelled?	v			
4.9. Are oil drums and plants/equipments provided with drip trays?	v			
4.10. Are drip trays free of oil and water?	L			
4.11. Is there any oil spillage? Clean-up the contaminated soil immediately?	/			
4.12. Is litter, foam or other objectionable matters in nearby water drain/sewer cleaned?		v		
4.13. Are asbestos wastes handled by registered professionals?			/	
4.14. Others (please specify)				
5. Resource Conservation				
5.1. Is water recycled wherever possible for dust suppression?		v		(\o w 10Ct:b2-1 ,.1P(Veat- r-e.w,erA
5.2. Is water pipe leakage and wastage prevented?		/		Ci'k W ,} n?cdt,j dkP. the broken pipe-

Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
5.3. Are diesel-powered plants and equipments shut off while not in use to reduce excessive use?	✓			
5.4. Are energy conservation practices adopted?	✓			
5.5. Are metal or other alternatives used to minimize the use of timber?	✓			
5.6. Are materials stored in good condition to prevent deterioration and wastage (e.g. covered, separated)?		✓		U-'5\ct.pt o:A,l n- ed u:\(jjr17 (0("t.
5.7. Are pesticides used under the requirement of Agriculture, Fishers and Conservation Department?			✓	
5.8. Others (please specify)				
6. Emergency Preparedness and Response				
6.1. Are fire extinguishers / fighting facilities properly maintained and not expired? Escape not blocked / obstructed?		✓		(1-t-u }lre u: u w"-bp." it\$ I'o M4IN? rY n h,'!Z -
6.2. Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?			✓	(\o d- 0-c.L-irJo.vi;l r
6.3. Others (please specify)				

Signature of Site Inspector



Date

29. 09. 2017

Reviewed by Project Manager



Date

30. 09. 2017



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ENVIRONMENTAL SITE INSPECTION CHECKLIST

Checklist No. : 02..

Project : na-fly VM Ch

Construction stage

inspection :

Inspection Date :

Inspected by :

Site Location :

Inspection Time :

Weather :

Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
1. Air Pollution Control				
1.1. Are the construction sites watered to minimize dust generated?	/			
1.2. Are stockpiles of dusty materials (size with more than 20 bags cement covered or watered?	v			
1.3. Cement debagging process undertaken in sheltered areas		v		
1.4. Are all vehicles carrying dusty loads covered/watered over prior to leaving the site?	/			
1.5. Are demolition work areas watered (e.g. trimming activities by using breaker)			/	
1.6. Are dusty roads paved and/or sprayed with water?	v			
1.7. Are dust controlled during percussive drilling or rock breaking?			v	
1.8. Are plant and equipment well maintained? (any black smoke observed, please indicate the plant/equipment and location)	/			
1.9. Is dark smoke controlled from plant?	v			
1.10. Are there enclosures around the main dust-generating activities? (e.g. grout mixing)	/			
1.11. Hoarding (not <2.4m) provided along boundaries and properly maintained (any damage / opening observed, please indicate the location).	v			
1.12. Are speed control measures applied? (e.g. speed limit sign)	v			

Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
1.13. Others (please specify)				
2. Water Pollution Control				
2.1. Are water discharge licenses valid?			✓	
2.2. Are conditions of the license complied with? (check the monitoring records and observe physically)			✓	
2.3. Are wastewater treatment system being used and properly maintained on site? (e.g. desilting tank)		✓		tud0\th j L..
2.4. Are there any wastewater discharged to the storm drains? Is the wastewater being treated?	✓			
2.5. Are measures provided to properly direct effluent to silt removal facilities? (e.g. provide earth bunds / U-channels)	✓			
2.6. Are u-channels and manholes free of silt and sediment?			✓	
2.7. Are sedimentation traps and tanks free of silt and sediment?			✓	
2.8. Are all manholes on-site covered and sealed?			✓	
2.9. Are sandbags/earth bund adopted to prevent washing away of sand/silt and wastewater to drains, catch pit, public road and footpath?	/			
2.10. Are vehicles and plants cleaned before leaving the site?	✓			
2.11. Are wheel washing facilities well maintained to prevent overflow, flooding sediment?			/	
2.12. Is sand and silt settled out in wheel washing bay and removed?			/	
2.13. Is the public road/area around the site entrance and site hoarding kept clean and free of muddy water?	✓			
2.14. Is domestic water directed to septic tanks or chemical toilets?	✓			
2.15. Others (please specify)				
3. Noise Control				
3.1. Do air compressors and generators operate with doors closed?		.. /		Nk'j er\T f""TWV) 'r- c.n pr < W-III...YA /OX. (ly/'" C"NV\tw*fl 9...Al.r f f- i ck. P bi,V h Q-

Inspection Items	Implemented?		N/A	Remarks
	Yes	No*		
3.2. Is idle plant/equipment turned off or throttled down?	/			
3.3. Do air compressors and hand-held breakers have valid noise emission labels (NEL)?			/	
3.4. Any noise mitigation measures adopted (e.g. use noise barrier, enclosure)?				
3.5. Are silenced equipments utilized?	V			
3.6. Others (please specify)				
4. Waste Management				
4.1. Is the site kept clean and tidy? (e.g. litter free, good housekeeping)	.. /			Yehls, ,wJ d. &I >
4.2. Are separate chutes used for inert and non-inert wastes?			/	
4.3. Are separated labelled containers / areas provided for facilitating recycling and waste segregation?		V		twl-cte \>'Mlv tl!M-f'6,
4.4. Are construction wastes / recyclable wastes and general refuse removed off site regularly?	/			
4.5. Are construction wastes collected and disposed of properly by licensed collectors?	/			
4.6. Are chemical wastes, if any, collected and disposed of properly by licensed collectors?			.. /	
4.7. Does chemical waste producer license covers all major chemical wastes produced on site?			.. /	
4.8. Are chemical wastes properly stored and labelled?			.. /	
4.9. Are oil drums and plants/equipments provided with drip trays?	V			
4.10. Are drip trays free of oil and water?	V			
4.11. Is there any oil spillage? Clean-up the contaminated soil immediately?	V			
4.12. Is litter, foam or other objectionable matters in nearby water drain/sewer cleaned?	V			
4.13. Are asbestos wastes handled by registered professionals?			.. /	
4.14. Others (please specify)				

Inspection Items	Implemented?		NIA	Remarks
	Yes	No*		
5. Resource Conservation				
5.1. Is water recycled wherever possible for dust suppression?		✓		(,ViVNrL v.;d£..6 <i>fi</i> c'Ve c.ont>d-t?c ct-rt?d(M to pl <i>g</i>
5.2. Is water pipe leakage and wastage prevented?	.. /			<i>7c drains</i>
5.3. Are diesel-powered plants and equipments shut off while not in use to reduce excessive use?				
5.4. Are energy conservation practices adopted?	✓			
5.5. Are metal or other alternatives used to minimize the use of timber?	.. /			
5.6. Are materials stored in good condition to prevent deterioration and wastage (e.g. covered, separated)?		✓		\,I"iJ <i>Q.hr2A.</i>
5.7. Are pesticides used under the requirement of Agriculture, Fisheries and Conservation Department?			✓	
5.8. Others (please specify)				
6. Emergency Preparedness and Response				
6.1. Are fire extinguishers / fighting facilities properly maintained and not expired? Escape not blocked / obstructed? <i>/</i>				
6.2. Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?			✓	<i>f'vo cUV<tcvt</i> <i><</i>
6.3. Others (please specify)				

Signature of Site Inspector

[Signature]

Date

13.10.2017

Reviewed by Project Manager

[Signature]

Date

24.10.2017