FRIMP-CDOR
Monitoring Form

Quarterly Internal Monitoring for 4th Quarter of 2020

MONITORING FORM (FRIMP-CDOR)
Quarterly Internal Monitoring for 4th Quarter of 2020

1. **Responses/Actions to Comments and Guidance from Government Authorities and the Public is presented in Table 1.**

Table 1: Summary of Monitoring Results

Monitoring Item	Monitoring Results during Report Period
Ambient Noise	For CP-1, the generated average ambient noise level during sampling in station P1-AQ1 49.0dBA while in station P1-AQ2 is 59.8dBA. Both stations at all time regimes are failed to meet the minimum environmental standard for Class AA. For CP-2, All generated results at all time regimes are failed to meet the NPCC prescribed environmental standard for Class AA with the ambient noise level during sampling is ranging between 44.6-58.5dBA. For CP-3, the ambient noise level recorded during monitoring is raging between 45.7-59.7dBA, which All generated results at all time regimes are failed to meet the NPCC prescribed environmental standard for Class AA. The main sources of noise in the area during this quarterly monitoring are passing vehicles include heavy trucks, motorcycles, and various types of vehicles. It is also noted that noise from people passing by along the monitoring stations and nearby establishment contributed to the noise level in the area.
Ambient Air	PM10, SO2 and NO2 at all stations are within the DENR standards. For TSP, all stations are below the 230 µg/Ncm except for station AQ2. The potential sources of TSP during monitoring were from the various types of vehicles passing along the road networks such as heavy trucks, motorcycles, public utility jeepneys and private cars. Dust re-suspension due to vehicular disturbance along road networks was observed.
Vibration Level	The average computed equivalent vibration acceleration during morning period is ranging between 0.1254 - 0.2090m/s2, for daytime period is 0.1264 - 0.2008m/s2, for evening period is 0.1254 - 1764m/s2 and for nighttime period 0.1254 – 1723m/s2. The observed vibration during monitoring could not be affecting the nearby structures along with the project.
Water Quality	The parameters that are within the environmental guidelines for Class C water are color, cyanide, mercury, pH, TSS, and temperature. The parameters that failed to meet the DENR environmental guidelines are fecal coliform, BOD, and oil & grease. There are no set environmental guidelines based on DAO 16-08 for total coliform, salinity, TDS, and turbidity. High concentrations of fecal coliform, BOD, and oil & grease during this quarterly monitoring might be the effect of direct discharge of wastewater from nearby structures in the river. It is also noted that backyard hog raising is present near the sampling stations. In addition, results of salinity, TDS and turbidity are still minimal which does not harm the river except for total coliform. High total coliform concentration might be also the result of direct discharge of wastewater from nearby structures.
River Water Flow	Regular river water flow is not affected by project.

2. Mitigation Measures

2.1 Ambient Noise

Ambient Noise levels were measured Centertek 323 Sound Level Meter at the vicinity of the established sampling points for ambient air quality monitoring on August 25 – September 2, 2020 in accordance with the standard procedures prescribed under Presidential Decree No. 984 (National Pollution Control Decree of 1976), and NPCC MC No. 1980-002. All six stations of ambient noise levels were compared to DENR Standard for Class AA. The Class AA refers to a section or contiguous area that requires quietness, such areas within 100m from school sites, nursery schools, hospitals, and special homes for the aged. The results of the 24-hours ambient noise level are presented in Table 3.

Table 3: Summary of Ambient Noise Level Results

Station	Description	Time Period	Unit	Limit (Class AA)*	Results
AQ1	Adjacent to Bonbon Elementary School, Brgy Bonbon CDO	Morning	dBA	45	50.0
		Daytime	dBA	50	50.4
		Evening	dBA	45	52.0
		Nighttime	dBA	40	43.6
		Average			**49.0**
AQ2	Immaculada Conception Chapel along Kauswagan-Puntod Road	Morning	dBA	50	59.0
		Daytime	dBA	45	63.6
		Evening	dBA	45	63.1
		Nighttime	dBA	40	53.5
		Average			**59.8**
AQ3	Inside Consolacion Elementary School, Brgy. Consolacion CDO	Morning	dBA	50	48.4
		Daytime	dBA	45	47.4
		Evening	dBA	45	47.7
		Nighttime	dBA	40	44.6
		Average			**47.0**
AQ4	Burgos Street – Iglesia Ni Cristo Church	Morning	dBA	50	55.2
		Daytime	dBA	45	58.5
		Evening	dBA	45	53.2
		Nighttime	dBA	40	49.0
		Average			**54.0**
AQ5	Acacia Street, Kagay-an Bridge,	Morning	dBA	50	52.4
		Daytime	dBA	45	57.2
		Evening	dBA	45	59.7
		Nighttime	dBA	40	49.7
		Average			**54.8**
AQ6	Carmen Balulang – Sharief Alawi Islamic Centre	Morning	dBA	50	50.3
		Daytime	dBA	45	50.4
		Evening	dBA	45	51.9
		Nighttime	dBA	40	45.7
		Average			**50.0**

Note: *NPCC MC
Red font = Exceeded the NPCC prescribed standard

Ambient noise levels at all stations for all time regimes during this quarter are exceeded the permissible level for Class AA by NPCC.

The lowest noise level in AQ1 is 43.6dBA recorded during nighttime and the highest noise was

recorded during daytime (50.4dBA) with an average noise level of 49.0dBA.

With the average noise level of 59.8dBA, AQ2 recorded the highest noise level among the six stations. The highest noise for this station is recorded during daytime (63.6dBA) while the lowest noise level is during nighttime (53.5dBA).

Station AQ3 recorded the lowest noise level during this monitoring with an average of 47.0dBA. The highest noise level is recorded during morning time (48.4dBA) while 44.6dBA is the lowest noise level recorded during nighttime.

In station AQ4, the average noise level during this quarter monitoring is 54.0dBA in which the lowest noise level recorded during nighttime while daytime recorded the highest noise level.

Similarly, the highest noise level in AQ2 is recorded during daytime (57.2dBA) while the lowest noise level recorded during nighttime (49.7dBA) with an average noise level of 54.8dBA.

Lastly, the average noise level in AQ6 is 50.0dBA during this monitoring. The lowest noise level is 45.7dBA recorded during nighttime while the highest noise level is recorded during evening time (51.9dBA).

Base on the observation, the main sources of noise in the area during this quarterly monitoring are passing vehicles include heavy trucks, motorcycles, and various types of vehicles. It is also noted that noise from people passing by along the monitoring stations and nearby establishment contributed to the noise level in the area.

2.2 Ambient Air Quality

The ambient air quality samplings were conducted on August 25 – September 2, 2020 to measure the ground level concentrations (GLCs) of PM_{10}, TSP, NO2 and SO2 at six sampling stations.

Ambient air samples were collected for a period of 24-hour averaging time for all air quality parameters for all stations. The collected samples were brought to Elarsi Laboratory, Inc., a DENR recognized laboratory, for analysis. Table 4 presented the details of the ambient air monitoring.

Table 4: Details of Ambient Air Monitoring

Stations	Description	Coordinates
AQ1	Adjacent to Bonbon Elementary School, Brgy Bonbon CDO	8°30'27.20"N, 124°38'54.70"E
AQ2	Immaculada Conception Chapel along Kauswagan-Puntod Road	8°30'03.50"N, 124°38'51.70"E
AQ3	Inside Consolacion Elementary School, Brgy. Consolacion CDO	8°29'28.70"N, 124°38'44.90"E
AQ4	Burgos Street – Iglesia Ni Cristo Church	8°28'58.70"N, 124°38'31.60"E
AQ5	Acacia Street, Kagay-an Bridge, Carmen	8°28'21.20"N, 124°38'19.80"E
AQ6	Balulang – Sharief Alawi Islamic Centre	8°26'45.40"N, 124°38'20.90"E

The monitoring was conducted in accordance with the standard methods of the DENR as prescribed in its DAO No. 2000-81, the Implementing Rules and Regulations of the Philippine Clean Air Act of 1999. The results of ambient air are presented in Table 5.

Table 5: Result of 24-hours Ambient Air Monitoring

Parameters	DENR Guidelines*	Stations					
		AQ1	AQ2	AQ3	AQ4	AQ5	AQ6
PM_{10}	150	75	148	30	52	69	57
TSP	230	133	284	42	105	142	75
NO_2	150	0.876	2.03	1.75	3.18	4.69	3.07
SO_2	180	1.39	1.12	0.986	1.787	1.680	0.577

Note: *NAAQG
Red font = Exceeded the NPCC prescribed standard

All parameters during this quarterly monitoring are within the DENR standards except for TSP at station AQ2 which exceeded the 230µg/Ncm.

The potential sources of TSP during monitoring were from the various types of vehicles passing along the road networks such as heavy trucks, motorcycles, public utility jeepneys and private cars. Dust re-suspension due to vehicular disturbance along road networks was observed.

2.3 Vibration

The vibration samplings were conducted on August 25 – September 2, 2020 using a PCE VD-3 vibration meter. The PCE VD-3meter measures acceleration in three axes (along x, y and z), the meter recorded acceleration in terms of g-force units. The meter could detect vibration plus/minus 18 g with a resolution of 0.00625 g.

The vibration meter is mounted on a fixed structure using the built-in magnet or using an adhesive over the platform to measure such as flagpole, benches, fences and any other fixed structures. The y-axis is oriented to the north using a compass and as much as possible horizontally leveled. The vibration meter was set up to collect vibration acceleration every 30-second in one-hour duration simultaneous with the noise level measurement at the same six (6) sampling locations.

The units reported by the PCE VD-3 is in g-force and can be readily convertible to m/s2 by dividing the vibration acceleration in g-force by 9.81. The vector sum or resultant of the 3-axis vibration was presented to eliminate the effect of the negative value.

For human response, average vibration amplitude is more appropriate because it takes time for the human body to respond to the excitation (the human body responds to average vibration amplitude, not a peak amplitude. For vibrations by traffic:

a. The frequency range is normally from 4 Hz to 80 Hz; sometimes up to 125 Hz; and
b. Amplitudes are generally in the range 0.005 m/s2 to 2 m/s2 for acceleration.

The equivalent measured vibration acceleration is in the range 2 m/s2 for a traffic related source at a maximum range of 125 Hz.

Comparison to the Vibration Criteria of Environmental Protection Agency New South Wales EPA-NSW), Australia as shown in the table below, the maximum value for intermittent acceleration is 0.8 m/s2 (preferred value is 0.40 m/s2) for daytime and nighttime period. Table 7 presented a summary of the vibration acceleration level.

Table 6: Acceptable vibration dose values for intermittent vibration ($m/s^{1.75}$)

Location	Daytime[1]		Night-time[1]	
	Preferred value	Maximum value	Preferred value	Maximum value
Critical areas[2]	0.10	0.20	0.10	0.20
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80

Note: [1] Daytime is 7.00 am to 10.00 pm and night-time is 10.00 pm to 7.00 am.
[2]Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring. These criteria are only indicative, and there may be a need to assess intermittent values against the continuous or impulsive criteria for critical areas.

Table 7. Results of Vibration Acceleration Level

Acceleration in m/s^2					
Station	**Range**	**Morning (0500H-0900H)**	**Daytime (0900H-1800H)**	**Evening (1800H-2200H)**	**Nighttime (2200H-0500H)**
AQ1 (Roadside beside Bonbon Elementary School)	Min	0.1264	0.1485	0.1274	0.1264
	Max	0.1386	0.1988	0.1764	0.1723
AQ2 (Roadside between Bonbon and Kauswagan sections, front of Immaculada Concepcion Chapel)	Min	0.1274	0.1448	0.1264	0.1274
	Max	0.1448	0.1764	0.1468	0.1468
AQ3 (Burgos St. inside Consolacion Elementary School)	Min	0.1264	0.1264	0.1254	0.1254
	Max	0.1407	0.1437	0.1376	0.1417
AQ4 (Burgos St. Cor. Montalban St. front of Iglesia Ni Cristo Chapel)	Min	0.1346	0.1355	0.1295	0.1284
	Max	0.2090	0.2008	0.1417	0.1631
AQ5 (Beside Acacia Street, Roadside under Kagay-an Bridge)	Min	0.1254	0.1366	0.1284	0.1274
	Max	0.1468	0.1784	0.1437	0.1427
AQ6 (Roadside front of Sharief Alawi Islamic Centre (Mosque))	Min	0.1254	0.1284	0.1295	0.1264
	Max	0.1325	0.1448	0.1498	0.1427
Vibration Criteria		Preferred Value – 0.4 Maximum Value – 0.8			

Red font = Exceeded the prescribed standard

Using the criteria set by EPA-NSW of Australia, the generated vibration acceleration during at all stations this quarterly monitoring is consistent with the preferred value of EPA-NSW.

The average computed equivalent vibration acceleration during morning period is ranging between 0.1254 - 0.2090m/s2, for daytime period is 0.1264 - 0.2008m/s2, for evening period is 0.1254 - 1764m/s2 and for nighttime period 0.1254 – 1723m/s2. The observed vibration during monitoring could not be affecting the nearby structures along with the project.

2.4 Surface Water Quality

The surface water quality monitoring was conducted along the Cagayan de Oro River on September 3, 2020. This monitoring was being conducted in compliance with the Self-Monitoring Report (SMR) and Compliance Monitoring Report (CMR) to be prepared by the Consultants and will be submitted thru the UPMO-FCMC Project Director to the DENR-EMB Region X.

Information such as date and time of sampling, observation of surroundings, odor and apparent color of water were also recorded during the actual conduct of quarterly monitoring. The results of the water quality analyses were compared to standards set by DENR specified in the DAO No. 08 series of 2016. Table 8 summarized the results of surface water quality in the Cagayan de Oro River.

Table 8: Water Quality Monitoring Results in Cagayan de Oro River

Parameter	Unit	Envi Guidelines* (Class C)	Monitoring Results					
			P1-WQ1	P1-WQ2	P2-WQ3	P2-WQ4	P3-WQ5	P3-WQ6
Total Coliform	MPN/100ml	-	$35x10^3$	$16x10^3$	$54x10^3$	$17x10^3$	$35x10^3$	$54x10^3$
Fecal Coliform	MPN/100ml	200	$35x10^3$	$92x10^2$	$54x10^3$	$11x10^2$	$35x10^3$	$92x10^3$
BOD	mg/L	7	37	40	29	33	47	41
Color	TCU	75	15	15	10	10	10	10
Cyanide	mg/L	0.1	0.004	0.005	0.04	0.006	0.007	0.005
Mercury	mg/L	0.002	0.0004	0.0004	0.0004	0.0007	0.0006	0.0004
Oil & grease	mg/L	2	2.93	4.05	6.90	0.12	6.39	6.71
pH	-	6.5-9.0	8.2	8.3	8.3	8.4	8.4	8.4
Salinity	g/L	-	0.0380	0.037	0.037	0.036	0.035	0.037
TDS	mg/L	-	95	106	88	139	109	25
TSS	mg/L	80	14	18	16	27	23	46
Turbidity	NTU	-						
Temperature	°C	25-31	28.8	28.7	28.7	28.8	28.7	28.5

Red font = Exceeded the DENR prescribed standard

The parameters that are within the environmental guidelines for Class C water are color, cyanide, mercury, pH, TSS, and temperature. The parameters that failed to meet the DENR environmental guidelines are fecal coliform, BOD, and oil & grease. There are no set environmental guidelines based on DAO 16-08 for total coliform, salinity, TDS, and turbidity.

High concentrations of fecal coliform, BOD, and oil & grease during this quarterly monitoring might be the effect of direct discharge of wastewater from nearby structures in the river. It is also noted that backyard hog raising is present near the sampling stations.

In addition, results of salinity, TDS and turbidity are still minimal which does not harm the river except for total coliform. High total coliform concentration might be also the result of direct discharge of wastewater from nearby structures.

3. Compliance with good practices in WASTE Management

3.1 HAZARDOUS WASTE Management

a) Contract Package 1

TYPE OF WASTE	QUANTITY	HANDLING/ STORAGE	DISPOSAL	REMARKS
Used industrial oil including sludge	448L	Stored in a sealed drum at motorpool located in Barangay Carmen, CDO	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.
Oil and Fuel Filters	15pcs	Stored in an open drum at Motorpool located in Barangay Carmen, Cagayan de Oro Ciy	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.
Contaminated Rags	15kg	To be stored at Motorpool located in Barangay Carmen, Cagayan de Oro City	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.
Bulbs/Fluorescent	3pcs	To be stored at Site Office located in Barangay Bonbon, Cagayan de Oro City.	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.

b) Contract Package 2

TYPE OF WASTE	QUANTITY	HANDLING/ STORAGE	DISPOSAL	REMARKS
Used Oil	100ltrs	Site storage area	To be transported by designated transporters accredited by the govt.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.
Oil and Fuel Filters	4pcs	Site storage area	To be transported by designated transporters accredited by the govt.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.
Contaminated Rags	5kls.	Site storage area	To be transported by designated transporters accredited by the govt.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.
Bulbs/Fluorescent	1	Site storage area	To be transported by designated transporters accredited by the govt.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.

c) **Contract Package 3**

TYPE OF WASTE	QUANTITY	HANDLING/ STORAGE	DISPOSAL	REMARKS
Used Oil	200L	Stored in a sealed drum at Motorpool located in Barangay Balulang, Cagayan de Oro Ciy	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.
Oil and Fuel Filters	10 pcs	Stored in a sealed drum at Motorpool located in Barangay Balulang, Cagayan de Oro Ciy	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.

Remarks: The Work Camp including Batching Plant and Motorpool was under construction during the reporting period. The Work Camp was made mostly of Pre-fabricated materials.

3.2 SOLID WASTE Management

a) **Contract Package 1:**

TYPE OF WASTE	HANDLING	STORAGE	DISPOSAL	REMARKS
Used Tires	8pcs	Site storage area	To be transported by designated transporters accredited by the government.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.
Recyclable (Cans/Bottles)	20kg	Site storage area	To be transported by designated transporters accredited by the government.	Some are place at Brgy. MRF
Non-Biodegradable (Plastic/ Styropor)	24kg	Site storage area	To be transported by designated transporters accredited by the government.	Some plastic bottles are recycled as end cap for protruding rebar

b) **Contract Package 2**

TYPE OF WASTE	HANDLING	STORAGE	DISPOSAL	REMARKS
Used Tires	1pc	Site storage area	To be transported by designated transporters accredited by the government.	To be disposed when storage is nearly full. Inquire from DENR for local transporter.
Recyclable (Cans/Bottles)	5kg	Site storage area	To be transported by designated transporters accredited by the govt.	Some are place at Brgy. MRF
Non-Biodegradable (Plastic/Styropor)	1.5tons	Site storage area	To be transported by designated transporters accredited by the govt.	Some plastic bottles are recycled as end cap for protruding rebar

c) **Contract Package 3:**

TYPE OF WASTE	HANDLING	STORAGE	DISPOSAL	REMARKS
Recyclable (Cans/Bottles)	5 kgs	Stored at Site Office located in Barangay Balulang, Cagayan de Oro City. To be collected and disposed to MRF (Balulang, Cagayan de Oro City).	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.
Non-Biodegradable (Plastic/Styropor)	3 kgs	Stored at Site Office located in Barangay Balulang, Cagayan de Oro City. To be collected and disposed to MRF (Balulang, Cagayan de Oro City).	To be transported by designated transporters accredited by the govt.	JEAK Trading is the designated transporter.

4 Natural Environment

- Ecosystem

Monitoring Item	Monitoring Results during Report Period
Endangered Species (Trees) Mangrove Forest (ha.)	No endangered trees species affected

- Tree Planting

Monitoring Item	Monitoring Results during Report Period
Number of trees planted	To be complied
Number by species	To be complied
Number by location	To be complied

5 Social Environment

- **For the IMA (Monthly during RAP Implementation, Quarterly during construction)**

Monitoring Item	Monitoring Results During Report Period
1. Budget and Timeframe – Schedule for the mobilization of appointed land acquisition and resettlement staff – Schedule for the capacity building and training activities – Achievement of resettlement implementation activities against the agreed implementation plan – Disbursement of funds in accordance to RAP – Schedule of social preparation phase – Schedule for the occupation of acquired land for project implementation	All staff needed for the land acquisition and resettlement component of the Project has been mobilized, except for the External Monitoring Agent (EMA). The EMA will be mobilized by the DPWH. Discussion on this matter was already initiated with the Project Manager of FRIMP-CDOR. It has been targeted that final payments to all claimants will end in 2021 December. This target date is contained in the RAP quarterly monitoring report. There is still delay in the compensation of PAPs. Currently, processing of documents for compensation is conducted at the FRIMP-CDOR in

	Cagayan de Oro and DPWH Central Office. There are more documents being processed at the moment compared to the number of PAPs who received their payments. The city government is assisting the DPWH Central Office disburse payments for ISFs structures/improvements. The DPWH has just signed a MOA with the city government to disburse PhP 170 million to claimants of structures/improvements. A supplementary MOA was signed for the amount of PhP 100 million. The relocation sites are now available to accommodate the PAPs. The Pahiron Relocation, however, does not have a permanent source of water until now. Presently, the 17 PAFs (out of reserved 299 units) who moved there in December 2020 get their supply of water from the weekly ration of the Bureau of Fire 10 and the Congressional Office of Rep. Uy. of 22 cubic meter of water. Meanwhile, the other relocation site in Macapaya is already hosting 76 families out of the reserved units of 141.
2. Delivery of Compensation – PAFs entitlements as provided in the entitlement matrix, such as payments on structure and lands. – Number of PAF to donate to the Government as per RA 8974 – Number of PAFs with land title under C.A. 141 (Public Land), Sec. 112 (states that the Gov't has 20-m reserved for public use), execute with quit claims – Landholdings with easements. – PAFs preference of payment compensation on land and expropriation. – Number of PAF receiving relocation & actual occupations. – Implementation of income and livelihood restoration activities.	There is delay until now in the compensation of the PAPs. As of December 2020, the masterlist reveals a total of 1,279 claimants (Lots-569 and Structures/improvements – 710). Out of the 569 lot claimants, 304 are identified for negotiated claims and 69 for expropriation proceedings of which 23 had been filed in court. For structures/improvements, out of 710 claimants, 144 claimants had received initial payment of 70% and 183 claimants received their final payments. With regards to transferring PAPs to relocation areas reserved by the city government, 17 out of the 299 housing units are occupied in Pahiron Relocation; and 76 out of the reserved 141 housing units are occupied in Macapaya. The land development for the Pagatpat Resettlement Site is ongoing and managed by Qingdao of the project's

	CP3. This is intended for the 700 indirectly-affected families found on the riverside. The regional IATF for Covid-19 has suspended all large gatherings in the city. The LRP trainings scheduled early this year of 2020 are all suspended. The training modules for this particular activity have been reviewed by the ESSD. These are the four (4) LRP training modules: (1) Values Formation with gender component, (2) Capacity building, (3) Resource Development with Business Planning, and (4) Leadership development with components of housing association management.
3. Public Participation – Schedules of Consultations & community activities. – PAFs awareness on their entitlements. – Issues in grievance mechanism and resolution of conflicts.	Community dialogues and consultations on matters of ROW acquisition were conducted in January – March 2019]. For this quarter, public consultation was temporarily suspended due to the rising threat of the Covid-19 in the city. Although, coordination meetings with concerned departments of the City Government and the three projects contractors continue using the virtual platform. Meanwhile coordination meetings with departments of the city government to address resettlement issues are not conducted as regularly as before because of the city's Covid-19 situation. The Resettlement Implementation Committee pursued its 5th Meeting on December 18, 2020 and likewise used the online platform. In this meeting, updates on structural measures, compensation, and relocation were shared with members and guests. In this meeting, community representatives brought to discussion pressing concerns, in particular the matter on the indirectly-affected families of the project asking if they will be compensated and relocated similar to the benefits provided to the directly-affected families. With regards to grievance redress, the number of complaints, mostly are requests for re-evaluation of their

	property cost, (3 complaints); request for inclusion in the masterlist (1); others (3) such as request for additional sluice gate; impact of ongoing civil works to residences near the ROW. These complaints are promptly investigated by the FRIMP-CDOR Office. Requests for re-appraisal follow a procedure starting with investigation, writing of another letter offer is complaint has basis, and then negotiation between the FRIMP-CDOR Office and the claimant. One community's request for additional sluice gate was decided in a meeting represented by the following offices: barangay council, the FRIMP-CDOR with consultant, City Government, and housing associations.
4. Benefits – Changes incurred in the patterns of occupation, production and resources compared to pre-project situation. – Changes in income and expenditures patterns compared to pre-project situation. – Changes in key social and cultural parameters relating to living standards. – Changes encountered by the vulnerable groups.	The objective the LRP is to restore to pre-project level or improve the livelihoods of PAFs. Changes in economic conditions of the PAPs cannot be ascertained at the moment. The livelihood component of the project has not yet started. Covid-19 has temporarily suspended the conduct of the trainings.

- **For the EMA (Monthly during RAP Implementation, Quarterly during construction)**

Monitoring Item	Monitoring Results During Report Period
1. Restoration of Living Standards – Compensation Payments on house without depreciation, fees or transfer cost – PAFs have options to avail housing program by LGU/NHA – Selection of community to preserve key social/cultural affiliation	Currently, the external monitoring for the RAP implementation has not yet started. The UPMO will commission an External Monitoring Agent (EMA) to undertake independent external monitoring and evaluation based on the "Main Points Discussed on Environmental and Social Considerations" as agreed upon between the DPWH and the JICA Mission in December 2013. It should be noted that the Consultant has prepared the Terms of Reference (TOR) for hiring the EMA.

2. Restoration of Livelihoods – Sufficiency of payment compensation to replace lost assets. – Assistance to re-establish the affected enterprises. – Effectiveness and sustainability of the provided income earning opportunities for the vulnerable groups. – Restoration of pre-project income levels and living standards through the jobs provided by the project.	
3. Levels of PAP Satisfaction – Awareness of PAFs on the resettlement procedures and their entitlements, including the housing program of LGU/NHA. – Assessment of PAFs on the restoration of their living standards and livelihood. – PAFs awareness on the grievance mechanism, including the procedures in the resolution of conflicts and their satisfactions.	
4. Effectiveness of Resettlement Planning – Proper identification of PAFs affected assets. – Sufficiency of budget and adequacy of timelines to properly meet objectives. – Resettlement sites ready in timely manner – Generosity of entitlement packages. – Identification and assistance to the vulnerable groups. – Actions of resettlement implementers on the unforeseen problems.	
5. Social and Environmental Impact – Unintended environmental impacts – Unintended impacts on employment or incomes	