

Republic of the Philippines Department of Environment and Natural Resources PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE MIMAROPA Region

DCT 2 4 2022

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DATE NO

MEMORANDUM

FOR

The Regional Director

MGB MIMAROPA Region

Ermita, Manila

FROM

The OIC, PENR Officer

SUBJECT

REPORT OF PMRB ON THE FIELD VERIFICATION OF THE

APPLIED QUARRY AREAS OF EDNA BALMES, FERNANDO

TORRES, AND NESTOR SALES

Respectfully forwarded is the compiled and comprehensive field verification report of the Provincial Mining Regulatory Board (PMRB) Technical Working Group for the Commercial Sand and Gravel (CSAG) Permit applications of the above applicants in Occidental Mindoro for the third quarter of CY 2022.

For information and record.

ERNESTO E. TAÑADA



PROVINCIAL MINING REGULATORY BOARD



Province of Occidental Mindoro MIMAROPA Region

REPORT ON THE FIELD VERIFICATION OF THE APPLIED QUARRY AREAS OF BALMES, TORRES, AND SALES

3rd QUARTER (2022)

Prepared by:

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BACKGROUND INFORMATION

Commercial Sand and Gravel (CSAG) Permit applicants Ms. Edna B. Balmes, Mr. Fernando A. Torres, and Ms. Nestor L. Sales submitted a request to the Provincial Mining Regulatory Board (PMRB) of Occidental Mindoro for a re-assessment and inspection of their applied quarry areas located at Busuanga River in Barangay Central, Municipality of San Jose.

The above applicants also requested that their CSAG Permit renewal application be approved and that they be allowed to extract any available volume of aggregates within the remaining portions of the applied areas that still cover the river channel after a structure was established across the sites.

In response to the foregoing, the undersigned proceeded to the proposed permit areas and conducted a field verification on October 12-13, 2022.

1. EDNA B. BALMES

A. General Information

The CSAG Permit application of Ms. Edna B. Balmes, a resident of Labangan, San Jose, Occidental Mindoro, covers a total area of **10,000** square meters along **Busuanga River** in Barangay Central, San Jose. The proposed area for extraction was initially inspected on 12 July 2022.

B. Findings/Observations

- a. The applied quarry site at Busuanga River is accessible by any utility vehicle via an unpaved access road connected to a segment of the National Road in the municipality, east of the site.
- b. According to available satellite imagery, the site is within the one (1) kilometer buffer zone of Busuanga Bridge and is also traversed by a concrete dike/embankment structure. As observed during the site inspection, this embankment structure runs across the applied area, leaving only a portion of the site that still covers the river channel. The other side of the embankment, in the southeast section of the site, already encompasses the low-lying plain and adjacent lot.
- c. During the assessment of the river segment near the proposed site, it was noted that water levels ranged from approximately 0.70m (red validation points within the river channel shown on the attached map) to more or less 1m towards the northwestern boundary of the applied area, in the central portion of the active channel. This particular segment is devoid of any sand/gravel bar deposits that are suitable and recommended for extraction/quarrying activities. (Please see the

attached satellite image – Photo 1 – of recommended quarrying sites). Riverbed deposits observed below the water table are consist mostly of cobble-sized sediments.

- d. Active riverbank erosion was noted on the opposite side of the river channel, already within the jurisdiction of Barangay Sto. Niño, Rizal.
- e. Both boundary markers and "Notice to the Public" signboard were not observed in the vicinity.

C. Comments and Recommendations

Hereunder are the comments and recommendations of the undersigned in view of the foregoing findings:

a. Delineation of the site based on on-site field assessment and desktop analysis using Geographic Information System (GIS) software and Google EarthTM reveals that only **0.336 ha** (**3,355.227 m²**) of the initial one (1) ha applied quarry site remains within the active river channel and may be potentially available for extraction. (See Location Map)

Given that suitable quarrying/extraction sites are areas with presence of sand/gravel bar deposits above the water table, the above-delineated site may not be adequate for extraction activities at the time of the inspection.

Further earth material extraction in the present state of the site may pose risk to the stability of that section of the river channel. To avoid the negative effects of quarrying (e.g., over-quarrying may increase the depth and velocity of the river flow which in turn may initiate intensive riverbank erosion and loss of sand and gravel deposits), the river must be allowed to recover and replenish.

- b. To properly determine and estimate the available volume of sand and gravel resources and the allowable extraction rate within the applied area, a comprehensive Geological Assessment of the site may be conducted.
- c. Since the embankment structure traverses the original one (1) hectare applied area, leaving only a minor portion within the river channel, it is recommended that the area be resurveyed the plot of which should cover the river channel with an updated location map/sketch plan and subject to a new Area Status Clearance and amendment of the Environmental Compliance Certificate.

FOR CONSIDERATION OF THE PMRB GIVEN THE ABOVE FINDINGS, COMMENTS AND RECOMMENDATIONS.

2. FERNANDO A. TORRES

A. General Information

The CSAG Permit application of Mr. Fernando A. Torres, a resident of Barangay 3, San Jose, Occidental Mindoro, covers a total area of **10,000** square meters along **Busuanga River** in Barangay Central, San Jose. The proposed area for extraction was initially inspected on 12 July 2022.

B. Findings/Observations

- a. The applied quarry site at Busuanga River is accessible by any utility vehicle via an unpaved access road connected to a segment of the National Road in the municipality, east of the site.
- b. According to available satellite imagery, the site is within the one (1) kilometer buffer zone of Busuanga Bridge and is also traversed by a concrete dike/embankment structure. As observed during the site inspection, this embankment structure runs across the applied area, leaving only a portion of the site that still covers the river channel. The other side of the embankment, in the southeast section of the site, already encompasses the low-lying plain and adjacent vegetated lot.
- c. During the assessment of the river segment near the proposed site, it was noted that water levels ranged from approximately 0.70m (red validation points within the river channel shown on the attached map) to more or less 1m towards the northwestern boundary of the applied area, in the central portion of the active channel. This particular segment is devoid of any sand/gravel bar deposits that are suitable and recommended for extraction/quarrying activities. (Please see the attached satellite image Photo 1 of recommended quarrying sites). Riverbed deposits observed below the water table are consist mostly of cobble-sized sediments.
- d. Active riverbank erosion was noted on the opposite side of the river channel, already within the jurisdiction of Barangay Sto. Niño, Rizal.
- e. Both boundary markers and "Notice to the Public" signboard were not observed in the vicinity.

C. Comments and Recommendations

Hereunder are the comments and recommendations of the undersigned in view of the foregoing findings:

a. Delineation of the site based on on-site field assessment and desktop analysis using Geographic Information System (GIS) software and Google EarthTM reveals that only 0.232 ha (2,319.714 m²) of the initial one (1) ha applied quarry site remains within the active river channel and may be potentially available for extraction. (See Location Map)

Given that suitable quarrying/extraction sites are areas with presence of sand/gravel bar deposits above the water table, the above-delineated site may not be adequate for extraction activities at the time of the inspection.

Further earth material extraction in the present state of the site may pose risk to the stability of that section of the river channel. To avoid the negative effects of quarrying (e.g., over-quarrying may increase the depth and velocity of the river flow which in turn may initiate intensive riverbank erosion and loss of sand and gravel deposits), the river must be allowed to recover and replenish.

- b. To properly determine and estimate the available volume of sand and gravel resources and the allowable extraction rate within the applied area, a comprehensive Geological Assessment of the site may be conducted.
- c. Since the embankment structure traverses the original one (1) hectare applied area, leaving only a minor portion within the river channel, it is recommended that the area be resurveyed the plot of which should cover the river channel with an updated location map/sketch plan and subject to a new Area Status Clearance and amendment of the Environmental Compliance Certificate.

FOR CONSIDERATION OF THE PMRB GIVEN THE ABOVE FINDINGS, COMMENTS AND RECOMMENDATIONS.

3. NESTOR L. SALES

A. General Information

The CSAG Permit application of Mr. Nestor L. Sales, a resident of San Jose, Occidental Mindoro, covers a total area of **10,000** square meters along **Busuanga River** in Barangay Central, San Jose. The proposed area for extraction was initially inspected on 12 July 2022.

B. Findings/Observations

- a. The applied quarry site at Busuanga River is accessible by any utility vehicle via an unpaved access road connected to a segment of the National Road in the municipality, east of the site.
- b. According to available satellite imagery, the site has an aerial distance of approximately 1.1 kilometers from Busuanga Bridge and is also traversed by a concrete dike/embankment structure. As observed during the site inspection, this embankment structure runs across the applied area, near its northwestern boundary, leaving only a minor portion of the site that still covers the river channel. The other side of the embankment, in the southeast section of the site, already encompasses the low-lying plain and adjacent vegetated lot.
- c. During the assessment of the river segment near the proposed site, it was noted that water levels ranged from approximately 0.70m (red validation points within the river channel shown on the attached map) to more or less 1m towards the central portion of the active channel. This particular segment is devoid of any sand/gravel bar deposits that are suitable and recommended for extraction/quarrying activities. (Please see the attached satellite image Photo 1 of recommended quarrying sites). Riverbed deposits observed below the water table are consist mostly of cobble-sized sediments.
- d. Active riverbank erosion was noted on the opposite side of the river channel, already within the jurisdiction of Barangay Sto. Niño, Rizal.
- e. Both boundary markers and "Notice to the Public" signboard were not observed in the vicinity.

C. Comments and Recommendations

Hereunder are the comments and recommendations of the undersigned in view of the foregoing findings:

a. Delineation of the site based on on-site field assessment and desktop analysis using Geographic Information System (GIS) software and Google EarthTM reveals that

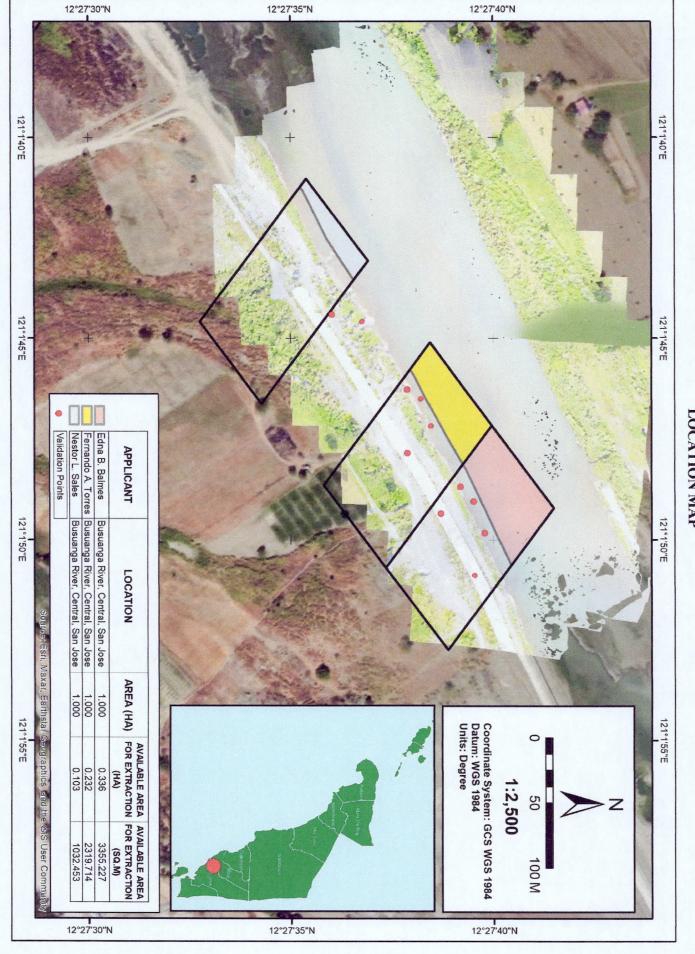
only 0.103 ha (1,032.453 m²) of the initial one (1) ha applied quarry site remains within the active river channel. (See Location Map)

Given that suitable quarrying/extraction sites are areas with presence of sand/gravel bar deposits above the water table, the above-delineated site may not be adequate for extraction activities at the time of the inspection.

Further earth material extraction in the present state of the site may pose risk to the stability of that section of the river channel. To avoid the negative of effects of quarrying (e.g., over-quarrying may increase the depth and velocity of the river flow which in turn may initiate intensive riverbank erosion and loss of sand and gravel deposits), the river must be allowed to recover and replenish.

- b. To properly determine and estimate the available volume of sand and gravel resources and the allowable extraction rate within the applied area, a comprehensive Geological Assessment of the site may be conducted.
- c. Since the embankment structure traverses the original one (1) hectare applied area, leaving only a minor portion within the river channel, it is recommended that the area be resurveyed the plot of which should cover the river channel with an updated location map/sketch plan and subject to a new Area Status Clearance and amendment of the Environmental Compliance Certificate.

FOR CONSIDERATION OF THE PMRB GIVEN THE ABOVE FINDINGS, COMMENTS AND RECOMMENDATIONS.



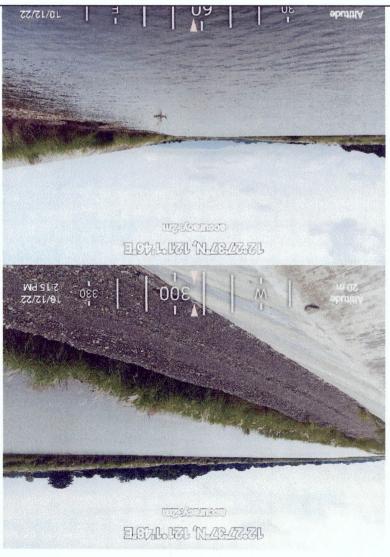
DOCUMENTATION



Photo 1. Satellite image showing suitable and recommended sites for sand and gravel extraction/quarrying activities



Photos 2-3. Portion of the applied area of Ms. Edna Balmes at Busuanga River, San Jose.



Photos 4-5. Portion of the applied area of Mr. Fernando Torres at Busuanga River, San Jose.



Photo 6. Portion of the applied area of Mr. Nestor Sales at Busuanga River, San Jose.