

ANNUAL REPORT

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PHYSICAL ACCOMPLISHMENT



Mines & Geosciences Bureau
Caraga Regional Office No. XIII
Surigao City

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FOREWORD

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PHISICAL ACCOMPLISHMENT



critical thinking does not contradict sustainability. On the contrary, critical thinking is a prerequisite of fact-based bounded notions in upholding sustainability. The principles of promoting Occupational Safety and Health, environmentally compatible actions and upholding social responsibilities that is focused on the long term, of the careful use of the minerals and raw materials, and of fair dealings with interested parties and employees can only be implemented successfully if they have been holistically and meaningfully integrated into the core of the organizational system. Sustainability has increasingly played an important role in the Mining Industry particularly in Caraga Region for several years, and recently, this Office ventures on a more systematic approach of rendering services by making it to the first stage of complying the International Standards.



“Responsibility shall start at the bottomless pit of the hearts and minds of the MGB employees, giving birth to Sustainability that must be transcended all throughout the whole Mining Companies in Caraga Region and shall be integrated into the whole of the value chain of the Mining Industry”

In order to guarantee sustainability, critical analysis and technical vitality regarding the profile, financial capability and legal complacency of the corporate firms are of high consideration and have to be dealt with lawfully. For the past months, this Office examined the intrinsic sustainability of every mining company per se as to surpassing the challenges with the current status of the wobbling industry. The results of this analysis gave indications as to the type and scope of the improvements required from the existing laws, to implementation and to its long term effectivity.

“MINING COMPANIES IN CARAGA REGION are among the names on the limelight of prestige from the previous years as they bagged different recognitions from the different award-giving body for marking the map in upholding Responsible Mining and Sustainable Development.”

MGB Regional Office 13 has already attained some important milestones in its efforts to push mining companies to go beyond mandated standards to reach a balance between economics, social and ecological interests.

For the current year, this Office has set a motto “Accelerate Change”. For an organization, as a law governing body, we have to be open, constantly evolving and adoptive for changes in order to successfully meet the challenges of the Caraga Mining Industry. We will work at further strengthening this positive fundamental attitude and to use it as a driver to help accelerate our change. We will be guided by our vision of becoming the vanguards of Caraga Mining Industry’s Core Value, advocating and abiding more even beyond what the law and the industry has to offer.

ROGER A. DE DIOS

Regional Director

EXECUTIVE SUMMARY

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Executive Summary

Guided with our mandate in the proper regulation of the local minerals industry, in the face of budgetary limitation and despite of the lack of technical personnel for the full implementation of our programs/activities/projects, the Mines and Geosciences Bureau (MGB), Caraga Regional Office No XIII, was able to deliver its commitments for the year 2017.

For years, Philippine Statistics Office consistently states that the local minerals industry remains one of the economic growth drivers of Caraga Region. But, regardless of the said statistical information, contributions of the local minerals industry were less appreciated.

Environmental protection, economic contribution and social development are crucial issues that were always raised against the minerals industry. Though it's already been part of its annual programs with huge amount allocated for that purpose, still it rests to be an arduous job to do.

Various sectors in the society are a bit sensitive in terms of environment and social impacts of the minerals industry. Notwithstanding the industry's contribution to the local economy, issues and concerns about environment always outshined the economic inputs.

The journey towards the government ultimate goal in terms of environmental protection and conservation is quite tough, but, the Office made it sure that its directives will be delivered accordingly.

Two of the major projects/activities/programs implemented in CY 2017 were the Approved Mining Rights monitoring and the Integrated Safety, Health, Environment and Social monitoring. These activities highlighted the major function of the Office as the regulatory agency for the minerals industry in the region.

With the strong leadership of MGB 13 Regional Director, these monitoring activities were rigorously conducted to ensure that mining operations adhere to government standards.

Another major activity that highlighted the CY 2017 operation was the conduct of this Office Enforcement program. Several mining and environment related complaints have been investigated that resulted to the issuance of Notice of Violations, Cease and Desist Orders and even filing of cases against the violators to the prosecutor's office.

Environmental protection and conservation is a big issue in the minerals industry. However, the conduct of strict monitoring

and firm implementation of enforcement program showcases the Office integrity and reliability. This manifest that the duties and responsibilities of the Office were earnestly delivered.

Several mining permits/contracts have been issued by MGB RXIII in CY 2017. For the issuance of the Ore Transport Permits (OTP) and Mineral Ore Export Permits (MOEP) alone, the Mine Management Division (MMD) attained a 225% and 237% of its annual targets, respectively. The issuance of OTP and MOEP is considered as demand-driven function because it is contingent on the application received by the Office from the mining companies.

The Use it or Lose it Program of the agency stays in 2017. This program was designed as part of the cleansing effort of the Bureau for all the dormant or inactive mining applications and permits. Parallel to this activity is the conduct of review of the performance of existing mining operations per EO no. 79. The Office was mandated to conduct rigid review of all mining permits in the region and forward the same to the Central Office. The Office registered 100% accomplishments to both actions.

Another major program of the Office in 2017 is the measures to improve Small-Scale Mining per EO 79. Several activities under this component are the following, to wit;

1. Provinces Inventoried for Small Scale Mining Site;
2. Minahang Bayan Sites Identified & Endorsed;
3. P/CMRBs operationalized;
4. Meetings Conducted/Participated; and
5. P/CMRB Regional Consultations Conducted

Several problems have been encountered by our technical men during the conduct of inventory of small scale mining site in every province. The greatest challenge is the peace and order situation of the small scale mining areas. However, with proper coordination and communication with the local authorities, targets of this program has been accomplished accordingly.

Identification of Minahang Bayan areas is a main component of the Office operation. Identifying areas suitable for declaration as Minahang Bayan requires land geological study or assessment. Once the area is appropriate for Minahang Bayan, we will encourage the present locators to file petition for its declaration. The declaration or even the endorsement of certain Minahang Bayan application is a rough job to undertake. Most especially when the area is within the approved mining permit or when the Local Government Unit concern does not support the endorsement. Fortunately, for 2017, the Office was able to achieved 100% of its targets for these activities.

With its dedicated members, all five (5) PMRBs and one (1) CMRB in the region were actively operationalized. Regular monthly meetings were conducted and issues were duly deliberated, while several resolutions have been passed concerning its respective jurisdiction.

The P/CMRB Regional Consultation was conducted. This endeavor served as the perfect avenue for information dissemination about the small scale mining industry's new laws, rules and regulation. Several issues have been raised during the consultation which was also aptly deliberated by the resource speakers. The conduct of such pushed a 100% compliance of our annual target.

As to the compliance to the implementation of the approved Work Program of every mining company, we were able to monitor forty two (42) approved mining rights. Such accomplishment is 112% above of our annual target. The only major obstacle that causes delay in the implementation of this activity is the unpredictable weather condition in the region.

In response to the mandate for the full enforcement of environmental standards in mining operations pursuant to EO no. 79, MGB RXIII unbendingly conducted the Integrated Safety, Health, Environment and Social (ISHES) monitoring. 2017 ended with forty eight (48) monitoring activities. This is 114% above of our annual targets. Just like the conduct of monitoring of approved mining rights, aside from emergency or intervening activities, the only hindrance that cause for the delay of ISHES monitoring is the unpredictable weather condition of Caraga specifically when the target area is in the Province of Dinagat islands.

To support the operation, various programs, activities and projects were being implemented under the Communication Plan for Minerals Development, to wit;

1. Conduct Awareness on Mineral Resources & Geosciences (MRGS);
2. Capacity Building on MRGS Rules, Laws & Regulations;
3. Generate/Publish/Disseminate Information and IEC Materials; and
4. National Linkages

The formulation of the Communication Plan for Minerals Development is a challenge that will always exist in the Office operation. This is the sole program of the government that will truthfully bring the industry to its stakeholders because its components serve as the Office only link to the community in addressing its various issues and concerns.

Indeed, promoting the significance of the minerals industry in nation building is a laborious mandate. But, with this endeavor, stakeholders are now actively participating in any mining related activities and more aware on its impact to the society. Stakeholders were now duly informed with the new developments of the minerals industry and the programs to be carried-out by the Office.

It is also a noteworthy year for the Geosciences Division (GD). Various programs, activities and projects under its scope were delivered as mandated in which most of its activities require fieldworks and on-site assessment.

Geosciences Division highlighted the year with the conduct of the following activities, to wit;

1. Geohazard Survey and Assessment;
2. Geological Mapping;
3. Groundwater Resources Assessment; and
4. Miscellaneous Geological Services

As the year ended, under the Geohazard Survey and Assessment, the division was able to accomplished 100% of its annual targets despite of some challenges that the technical personnel encountered in the field.

One of the major components of this program was Vulnerability and Risk Assessment (VRA). Assessments were conducted to allow the identification of areas with critical concern and help to guide the concern authorities in designing mitigation efforts. For CY 2017 Twelve (12) municipalities were being assessed all over the region. During the conduct of VRA, the division as well conducted an Updating of 1:10,000 Scale geohazard maps as a result of changes due to natural calamities.

On October 2017, some of Geosciences Division technical personnel travelled to Dagohoy, Bohol to conduct a Detailed Sub-surface Assessment. This is to assess the occurrence of sinkholes in the island.

To fully inform the community on the impact of the changes in the environment due to natural calamities, thousands of IEC materials have been disseminated to various Local Government Units, private individuals and other stakeholders. Other than that, signages/billboards have been installed also in selected locations in the region most particularly in highly vulnerable areas.

One of the components under the Geohazard IEC Materials Dissemination is the Tri-Media campaign of the Geosciences Division. Tri-Media campaign was designed to have broader reach or boundless stretch of information dissemination regarding geohazard or areas that is susceptible to natural calamities.

The Mines and Geosciences Bureau is one of the government agencies that is authorized to conduct environmental assessment due to manmade or natural disasters. Hence, all the division's technical staff has been sent to various trainings, workshops and seminars for them to be equipped and updated on new laws, rules and regulations, developments and programs of the government.

With all the programs designed by the national government that is implemented through the MGB Regional Offices, it is the Local Government Units who will truly benefit from it. The results of the geohazard survey and assessment will be forwarded to every LGUs as their basis for planning and other future developments in their locality.

Caraga Region is one of the areas in the country where it is prone to all types of weather disturbances. Hence, MGB RXIII maintains the operation of its Geohazards Operations Center fortified with various types of emergency equipment.

In CY 2017, about fourteen (14) municipalities in the region were being assessed with Coastal Geohazard. This is conducted to identify the extent or impact of climate change in coastal areas in Caraga Region. Herewith, coastal barangays and municipalities will be fully informed on the changes of their coastal areas not only due to climate change or natural calamities but also due to manmade glitches that roots the sudden changes in the area. This could be their basis in planning for their yet to come improvements.

Geological mapping was also one of the major activities of MGB RXIII in CY 2017. The Office was assigned to conduct quadrangle geological mapping in Region V. This is conducted to identify the geological features of the area. The result of this could be helpful for the identification and distribution of different types of rock and surficial deposits, as well as locations of geologic structures such as faults and folds. After the conduct of such survey, a geologic map will be generated which will be the primary source of information for various aspects of land-use planning, including the siting of buildings and transportation systems.

One provincial mineral resource map was also updated. This resource map is an open-source tool that helps us make better decisions by giving us better insights into the location and distribution of our mineral resources.

The major challenge that continues to plague at the Chemical Laboratory Section was the uninstalled/inefficient fume hood scrubber which for years now was the main cause of under accomplished target of Laboratory Services. The said equipment is the major factor that affects the desired output for analysis and determinations of samples. Filing of charges against the said supplier is now being considered.

2017 also unfolded with the conduct of the Groundwater Resources Mapping. This activity is essential because it will help us identify the potential source of potable water. The map generated displays information which could also be the basis for land-use planning.

For the Finance and Administrative Division, it recorded a 6% increase in the Share, Grants and Donations account that pertains to revenue collected made from Royalties under Republic Act No. 7160. Such collections in CY2017 amounted to P1,102,782,921.60, this is a 6% increase from CY2016's P1,040,219,896.59 Royalty collection.

The DENR-Mines and Geosciences Bureau XIII has a total of 54 itemized positions per new Personnel Services Itemization and Plantilla of Personnel (PSIPOP). A total of 7 personnel were promoted, 2 contractual personnel were hired from contractual to regular status and 2 personnel were transferred to this Office.

The year 2017 was a productive year for MGB RXIII. Not only that we have accomplished more than 100% of all of our annual targets but because of major events that were held in the region as fruits of our Regional Director's innovative ideas. In partnership with the mining companies in the region, we have facilitated and conducted various seminars, trainings and workshops that promote and enhance collaboration with various stakeholders in the region.

New policies and guidelines have been formulated for the betterment of some government programs implementation. MGB RXIII Regional Director Roger A. De Dios made changes that serve as platform of how effective are the programs of the agency for the minerals industry in terms of environment, economic and social development not only for the host mining communities but for the whole region in general.

One notable change that Regional Director De Dios has made was the bridging of minerals industry to the people by conveying mining related issues and concerns unswervingly to the public through the conduct of quarterly press conferences with the presence of local media, mining companies, civil society organizations and other stakeholders in the region.

With all of these innovations or initiatives made by the MGB RXIII through the good governance and strong leadership of our Regional Director, and with apposite coordination, collaboration and support from various concern stakeholders; projects, activities and programs of the government will appropriately be fulfilled and delivered as mandated.

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General Administrative & Support Services

Finance Services

Collection

The Mines and Geosciences Bureau RO XIII income collections as of December 31, 2017 amounted to ₱1,134,084,204.60. Components of this income are as follows:

A. Service and Business Income - ₱ 31,301,283.00

The breakdown of the Service and Business Income are as follows:

Particulars	As of Dec 2017
Permit Fees	
Application Fees	₱ 75,300.00
Assessment Fee	12,000.00
Clearance Fees	336,000.00
Evaluation Fee	80,000.00
Filing/Processing Fee	14,300.00
Ore Transport Permit	2,195,500.00
Registration Fees	695,800.00
Renewal Fee	11,000.00
Transfer/Assignment Fee	373,720.00
Other Permit and License Fee	165,400.00
Total Permit Fees	₱ 3,959,020.00
Supervision and Regulation Enforcement Fees	
Accreditation Fees	₱ 15,000.00
Docketing Fee	5,000.00
Fines and Penalties - Service Income	1,000,530.00
Inspection Fee	288,000.00
Investigation Fee	18,000.00
Regulatory Fee	5,992,110.00
Validation Fee	462,000.00
Verification Fee	19,386,000.00
Total Supervision and Regulation Enforcement Fees	₱ 27,166,640.00
Miscellaneous Income	
Bid Documents	₱ 200.00
Certified True Copy/Photocopying Fee	8,843.00
Letter of Request	11,600.00
Total Miscellaneous Income	₱ 20,643.00
Other Service Income	
Laboratory Analysis	₱ 138,700.00
Certification for Result of Laboratory Analysis	8,680.00
Publication Fee	7,600.00
Total Other Service Income	₱ 154,980.00
TOTAL SERVICE AND BUSINESS INCOME	₱ 31,301,283.00

A. Shares, Grants and Donations - ₱ 1,102,782,921.60

The Share, Grants and Donations account pertains to revenue collected made from Royalties under Republic Act No. 7160. Share, Grants and Donations collections in CY2017 amounted to P1,102,782,921.60, this is a 6% increase to CY2016's P1,040,219,896.59 Royalty collection.

BUR:

As of December 2017 our utilization rate for Allotment vs Obligation is 91% while 97% for the Obligation against Disbursement.

AGEING OF CASH ADVANCES

Cash advances of officers and employees, special disbursing officer and operating expenses are granted to employees for special and official purposes. Cash advance granted should be liquidated within 30 days after return to his permanent official station in the case of local travels and 60 days in the case of foreign travels. Failure of the Accountable Officer to liquidate his cash advance within the prescribed period shall constitute a valid cause for the withholding of his salary and the instructions of other sanctions.

Unliquidated cash advances as of December 31, 2017 amounted to 417,070.00, which is aged less than 30 days from the due date. Table 1 below indicates cash advances granted and liquidations per quarter.

Table 1

Quarter	Cash Advance Granted	Liquidations
1st	593,950.00	717,840.56
2nd	1,158,460.00	571,506.22
3rd	906,651.24	1,405,480.49
4th	3,347,691.28	873,650.03
Total	6,006,752.52	3,568,477.30

Accountable officers who failed to liquidate within the prescribe period will automatically have deductions to his/her salary. Accounting personnel will take in-charge to prepare schedule/statement for the refund and the refundable amount will be remitted to the Bureau of Treasury. With this, no cash advances should be granted to any officer or employee once previous advances were still unliquidated. Accounting personnel will strictly monitor cash advances as per accounting rules and regulations.

Manpower

The DENR-Mines and Geosciences Bureau XIII has a total of 54 itemized positions per new Personnel Services Itemization and Plantilla of Personnel (PSIPOP).

A total of 7 personnel were promoted, 2 contractual personnel were hired from contractual to regular status and 2 personnel were transferred to this Office.

Report on Supplies (Annual Procurement Plan)

A total of P2,785,717.48 were purchased on Office supplies for CY 2016. As of December 29, 2017 P2,232,460.59 worth of office supplies were released to different divisions for their official use. Based on actual physical count made a total of P553,256.89 worth of office supplies unissued/released.

For Office Equipment, P157,445.00 worth of Office Equipment were being purchased.

There were 30 purchase orders (PO's) has been posted in the PHILGEPS and 25 were awarded to winning bidders. The rest of awarding of winning bidders is still on going.

Career and Personnel Development

Laying emphasis on career advancement, the Management facilitated the attendance and participation of 132 employees in seminar/ training/ workshop/ conference for professional advancement.

Human Resource Development

The Human Resource Management Service of this Office has worked on various compliances with the Civil Service Commission rules and regulations. The Office maintains its timekeeping system with the use of a biometrics finger prints registry scanner. It minimizes the error caused by individual preparation of the daily time records (DTR) and ensures the fidelity of time records being kept by HRMS.

HRMS is continues its task of posting, maintaining and filing personnel data. This includes updating of personnel service records, personal data sheets(PDS), posting and updating of personnel individual leave credit ledgers, filling of performance evaluation system records, assets and liabilities, individual profile ready for submission to various scholarship grants call, among others.

DENR-MGB13 has cooperated with various activities initiated by the DENR and MGB. The Office did not miss any calls for management conferences, training/seminar and other sectoral meetings. The Office also actively cooperated with the Civil Service Commission in providing management and supervisory development to its key personnel.

Submission of personnel reports on monthly, semi-annual and annual has been satisfactorily complied. A total of 1,203 travel orders of the employees were recorded by this Office.

The agency is prompt in hanging the Citizens Charter in the Office wall, posting of No Fixers message per compliance with the Presidential directive in the eradication of corruption in the government agencies. Likewise, the Automatic Debit Account for payroll and other and other benefits is also adopted.

The submission of Statement of Assets, Liabilities and Networth (SALN) has been religiously complied and submitted on February 2017. The SALN review committee checked the compliance of individual SALN prior to submission to the Deputy Ombudsman in Davao City.

The Office observed the compliance of Service Excellence Thru Continuous Systems Innovation Monitoring and Evaluation (SECSIME) by providing the clients the best services can offered to them and by continually monitored by the key officials of the bureau'S compliance

Human Resource Development

To ensure sound working condition and convenience of our clients, DENR-MGB13 has continuously implemented various repairs, improvements and maintenance within Office compound. Likewise, adequate information and communications connectivity are being maintained to ensure prompt reception and transmission of relevant information to DENR Offices and external linkages.

The General Services has likewise ensured mobility of Office Personnel by maintaining the running condition of all vehicles.

To ensure sound Office operations, the General Services has promptly on procured necessary office supplies. Similarly, this Office continues to support the well-being of all employees by providing enough space for sports and fitness activities. Through the efforts of DENR-MGB13 Tennis Club, the tennis court is well maintained and is always made available for the purpose.

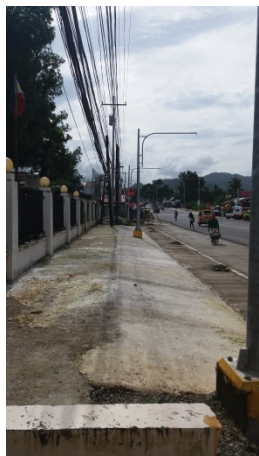
DENR-MGB13 is always harmonizing the execution of its mandate and promoting the welfare of its employees.

Ongoing Office improvements:



MGB 13 Mini Library

MGB 13 Waiting Shed



MGB 13 Parking Area



MGB 13 Records Room



Expansion of MGB 13 Training Center

In line with International Organization for Standardization (ISO), this Office set forth levels of development and adapted changes and innovations to obey on the demand of service of the organization. It is essential for the body that all people are competent, empowered and engaged in delivering value.

MGB Regional Office 13 is committed to be an effective steward of the country's mineral resources by delivering the highest quality services to the demand of the industry and mining stakeholders. It shall earnestly adhere to the Quality Management System and continuously seek opportunities for continual improvement thru:

C A R A G A

- C** – committed to render services with highest satisfaction to our clients
- A** – advocates strict compliance on mining statutory standards and geo-scientific assessments to serve the public and nation with scientific reliability
- R** – responsive to the needs and demands of our interested parties
- A** – adaptive to new mining and geosciences technologies and support continual capacity improvement to sustain competence of the human resources
- G** – geared towards the optimization of the available resources to satisfy the Quality Management System requirements
- A** – anchored on the principles of sustainable development through upholding responsible mining that is socially, economically and environmentally acceptable.

On December 13-15, 2017, MGB Regional Office 13 had undergone the internal audit to validate the preparedness and implication of ISO as currently incorporated to the organization. Recently, the organization will undergo the first stage audit on January 16, 2018 and will craft up the second stage external audit on January 31, 2018.

COMPLAN

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PHISICAL ACCOMPLISHMENT

Communication Plan for Minerals Development

Communication Plan is formulated to intensify Information, Education and Communication campaign in CARAGA Region. Aside from being one of the major functions of MGB 13, this program is designed in such a way that it will make the presence of the mining felt in the community.

There are four (4) major components under Communication Plan, namely;

1. Conduct Awareness and Advocacy on Mineral Resources and Geosciences (MRGS);
2. Capacity Building on MRGS Laws, Rules and Regulations;
3. Generate/Publish/Disseminate Information & Information, Education and Communication (IEC) Materials; and
4. National & International Linkages

Conduct Awareness and Advocacy on Mineral Resources and Geosciences (MRGS)

Stakeholders Forum

Stakeholders Forum will be conducted to deliver the MGB's mandate to the people with the same interest of the organization. It is an avenue also for the Office to listen to various voices concerning to the status of the minerals industry.

CY 2016 has the following accomplishments, to wit;

Performance Indicator	Annual Target	Annual Accom.	% Accom.
Dialogues with Sangguniang Panlalawigan/Bayan/ Panlungsod/Barangay	5	5	100%
Dialogues with other groups (Religious groups, CSO, academe, etc.)	12	13	108%
Radio/TV guestings (no.)	12	32	267%
Press releases/photo releases/feature stories (no.)	12	12	100%



With guest Engr. Gimoto, MGB 13 Economist, Ms. Bajao hosted one of the Readio Programs

Capacity Building on MRGS Rules, Laws and Regulations

Workshops/Training Conducted/Coordinated Participated on

As the regulatory body of the minerals industry, various workshops/trainings were conducted to equip everyone in terms of mining laws, rules and regulations.

Capacity Building on MRGS Rules, Laws & Regulations:

Workshops/training conducted/coordinated participated on: (no.)			
For MGB personnel to attend to (no.)	6	29	483%
For LGUs and other stakeholders (no.)	3	3	100%
For Small Scale Miners (no.)	2	2	100%



MGB RXIII attended the Training and Capability Building for Personnel Responsible for Statistical Data and Analysis, Website Maintenance and Information Dissemination

MGB RXIII and Caraga mining firms take part in the 64th ANMSEC Minerals Industry Symposium



MGB XIII Conducted the Regional P/CMRB Consultation @ MGB XIII Regional Training Center, Surigao City

Generate/Publish/Disseminate Information & IEC Materials

Effective Information, Education and Communication (IEC) materials are an important component in promoting the minerals industry. This component highlights the various forms of information disseminations to reinforce what people already know, and to contribute to changing landscape of the mining sector in terms of its laws, industry updates, its future programs and projects.

Performance Indicator	Annual Target	Annual Accomplishment	% Accomplishment
Website Established	1	1	100%
Articles Issued	24	24	100%
IEC materials produced	4	5	125%
IEC materials reproduced/distributed	100	609	609%
Statistics reports submitted to MGBCO	32	32	100%
Maps/Map Info Database submitted to MGBCO	24	24	100%
MRGS reports submitted to MGBCO	35	35	100%

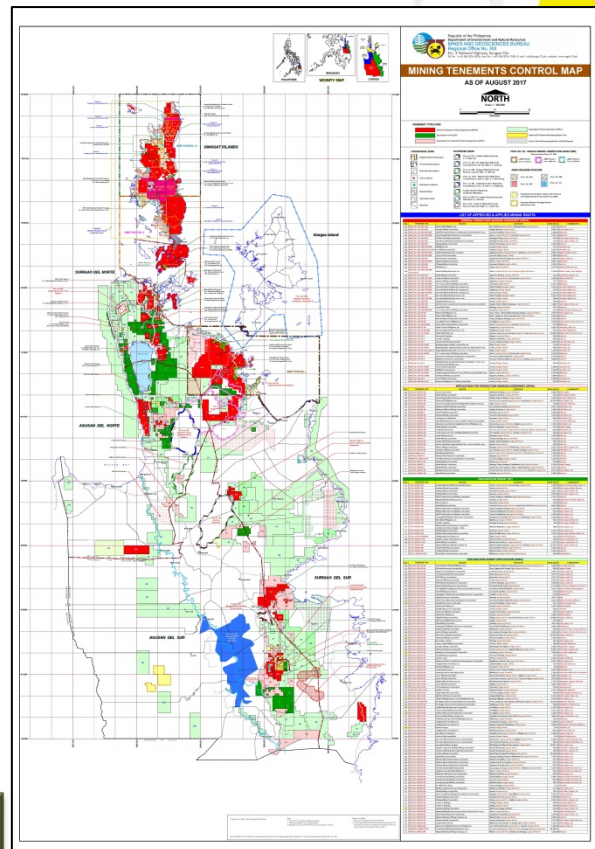
Website Established/ Maintained



Heading of MGB 13 Official Website



One of the 3 IEC Materials Produced & Reproduced by the Office



Caraga Tenement Map

National Linkages

For the whole year of CY 2017, MGB 13 has coordinated/Participated various meetings as our way of linking our projects/activities/programs to other government & private agencies and other stakeholders.

Performance Indicator	Annual Target	Annual Accomplishment	% Accomplishment
Linkages Coordinated (no.)	12	31	248%



Representatives of Caraga local government units, Community Relations Officers and official representatives of mining companies and processing plants, together with the Social Development Section personnel of MGB RXIII & The Department of the Interior and Local Government – Caraga Regional Office, took part in the activity re SDMP Rollout-Consultation & Reorientation at Cebu City



During the conduct of one of the MGB RXIII quarterly conferences

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PHISICAL ACCOMPLISHMENT

GEOSCIENCES DIVISION

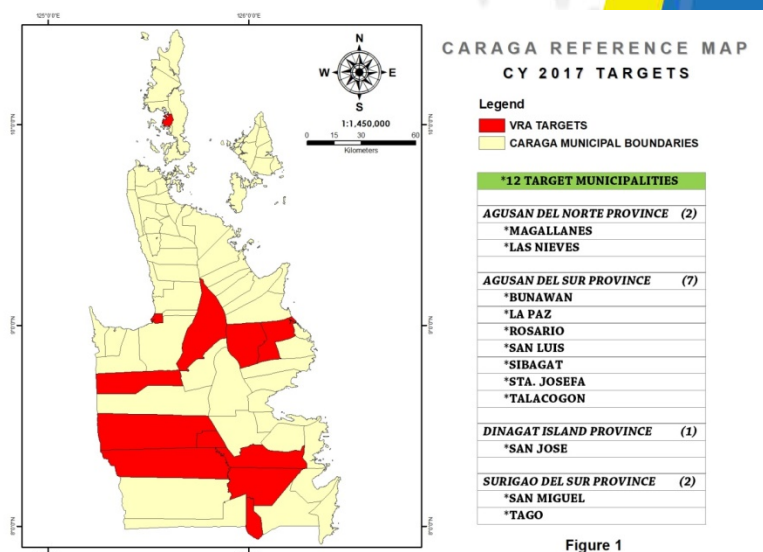
VULNERABILITY AND RISK ASSESSMENT

One of the major contribution of the Mines and Geosciences Bureau to the Disaster Risk Reduction Management / Climate Change Adaptation initiatives of the National Government thru a new project, Vulnerability and Risk Assessment (VRA) which started in year 2015. With the accomplished geohazard maps as a key input, VRA primarily aims to generate exposure maps of the population, build-up areas and lifeline infrastructures such as roads to rain-induced hazards such as flooding and landslides. It however also provides an opportunity to update the existing geohazard maps and validate those cities or municipalities in which the 10K geohazard mapping and assessment was undertaken thru outsource and thru MOA with mining companies.

10K Geohazard Maps and the hazard exposure maps generated by the VRA activity proved useful to the Local Government Unit as a vital input in their respective Contingency Planning, Preparedness and Mitigation Plan for Disaster Risk Reduction as well as their integration with the Comprehensive Land Use plan.

For CY 2017, twelve (12) municipalities of Caraga Region were covered by the VRA program (Figure 1). These are:

1. Magallanes, Agusan del Norte
2. Las Nieves, Agusan del Norte
3. Sibagat, Agusan del Sur
4. Santa Josefa, Agusan del Sur
5. Tago, Surigao del Sur
6. San Miguel, Surigao del Sur
7. La Paz, Agusan del Sur
8. San Jose, Province of Dinagat islands
9. San Luis, Agusan del Sur
10. Talacogon, Agusan del Sur
11. Bunawan, Agusan del Sur
12. Rosario, Agusan del Sur



Updating of 1:10,000-scale landslide and flood susceptibility geohazard maps of San Miguel, Surigao del Sur generated by SRDP Consultancy Services was done during the VRA activity.

VRA in Magallenes, Agusan del Norte:



A rockfall incident in Purok 3, Brgy. Taod-oy with the debris materials blocking a segment of a gravel-paved secondary road (MGB fieldmen for scale).



Guisan Elementary School which is located in a flood prone area. Right photo shows a school teacher pointing the usual flood height experienced by the school during heavy rains.



Photos show a river protection installed along the confluence of the Taguibo River to the Agusan River in Brgy. Poblacion in response to flood hazards.

VRA in Las Nieves, Agusan del Norte



Pinana-an Elementary School at Brgy. Pinana-an, Las Nieves, Agusan del Norte are exposed to high to very High flood susceptibility.

VRA in Sta. Josefa, Agusan del Sur



Local residence pointing out the highest flood height they experienced in Purok 3 of Barangay Concepcion. Geographic coordinates 7° 59' 06.4" north latitude 126° 00' 12.1" east longitude.



Photo shows residence pointing out the highest flood level of road network going to Aurora Elementary School in Purok 4 Barangay Aurora. Inaccessible when heavy rainfall strikes. Geographic coordinates 8° 00' 49.8" north latitude 126° 01' 03.5" east longitude

Residents of prk. 2-C, Brgy. Lingayao, Las Nieves. Agusan del Norte were exposed to high flood susceptibility.



Lingayao Elementary school in Brgy Lingayao, Las Nieves, Agusan del Norte is exposed to moderate to high flood susceptibility.

VRA in Sibagat, Surigao del Sur



Residents of Prk. 5, Brgy. Tag-oyango, Las Nieves, Agusan del Sur are exposed to moderate flood susceptibility.



A landslide at the back of one of the school building in San Isidro Elementary School in Brgy Afga occurred last April 2017 due to heavy rainfall.



Road cut along Prk 5, Sitio Kahayagan, Brgy. Del Rosario, Sibagat, Agusan del Sur - named as "Taclaban" due to frequent landslide along the road due to very steep slope. rainfall.

VRA in San Miguel, Surigao del Sur



Photo of Bitaugan creek going to Brgy Bitaugan proper, unable to cross during heavy rainfall due to increase of water level. Geographic coordinates 9° 02' 19.0" North latitude 125° 53' 48.2" East longitude.



Road network going to Barangay Bitaugan showing muddy and highly damage which hard to access on motorcycles crossing the road. Geographic coordinates 9° 01' 42.4" North latitude 125° 53' 28.5" East longitude.



Active river scouring in Cagdao creek embankment spotted in Purok 5-B of Barangay Castillo. The observed scoured was almost hit the access road in the area. Geographic coordinates 8° 54' 53.6" North latitude 125° 57' 55.0" East longitude.



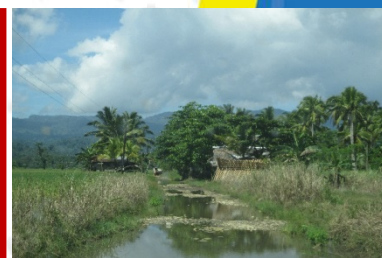
Photo of local residence in Barangay San Roque Purok Daan II pointing out the highest flood height they experienced. Geographic coordinates 8° 54' 14.7" North latitude 126° 00' 14.3" East longitude.

VRA in Tago, Surigao del Sur

A riverbank erosion scouring a gravel-paved road in Purok Bacan-Bacan, Brgy. Layog affecting the gravel-paved barangay road and some houses nearby.



Segments of gravel-paved dirt road which are highly and moderately susceptible to flood in Brgy. Caras-an (Left) and Umbay (Right), respectively.



Farm-to-market road in Brgy. Badong which is very high in flood inundation, about 2 meter flood height is reported due to riverine flooding from the Tago River.



VRA in San Luis, Agusan del Sur



Road network going down to Barangay Binicalan proper showing muddy and rough, difficult to access on motorcycles crossing the area especially in bad weather condition. Geographic coordinates 8° 22' 26.4" north latitude 125° 33' 17.7" east longitude.



Local residence point out the highest level of flood water they experienced during heavy rainfall and typhoon located in Purok 3 Barangay Don Alejandro. Geographic coordinates 8° 26' 38.5" north latitude 125° 43' 11.8" east longitude.



Massive landslide at road network Purok 7 Barangay Don Alejandro occurred last January 2017 brought by intense heavy rainfall. Geographic coordinates 8° 23' 32.5" north latitude 125° 41' 02.7" east longitude.

VRA in Talacogon, Agusan del Sur



Geotagging of Sabang Gibong Elementary School in Purok 1 Barangay Sabang Gibong. School building was installed on elevated flooring with approximate height of 2.50-3.0 meters to avert flood hazard. Geographic location 8° 19' 24.78" north latitude 125° 53' 18.4" east longitude.



View of residential houses in Sitio Tumulog Barangay Zillovia located on a slope terrain. Barangay Zillovia falls under moderate to high landslide susceptibility. Geographic location 8° 20' 23.2" north latitude 125° 31' 28.4" east longitude.



Local residence pointing out the highest flood height they experienced in Purok 3 Barangay San Nicolas. Building on the picture is the Talacogon National High School. Geographic location 8° 27' 31.1" north latitude 125° 46' 51.7" east longitude.



View of floating residential houses situated in Agusan River Purok Sampa Barangay San Agustin, which are highly prone to flash floods. Geographic location 8° 27' 05.2" north latitude 125° 47' 13.9" east longitude.

VRA in Bunawan, Agusan del Sur



Photo showing 3 houses was observed near landslide prone area located at Purok 8, Bunawan Brooks, Bunawan. This site is a quarry for backfilling purposes. The wall is estimated to be around 15 – 20 meters. Distance from the house to the wall is ranging 3 – 5 meters.



Photo showing the condition of bridge from Libertad proper going to Purok 9 along Simulao River. GPS Coordinates: N8 06 28.6 E126 01 33.7



Photo showing the flood height markers on the post of Evacuation Center in Campo 6, Barangay Nueva Era were flood height reaches up to 9 ft.



Floating houses of Prk. 7, Brgy. San Marcos, Bunawan, Agusan del Sur are exposed to very high flood susceptibility

Houses exposed to high to very high flood susceptibility at Prk 2, Brgy. San Marcos, Bunawan, Agusan del Sur



VRA in Rosario, Agusan del Sur



Photo showing the Jose Cuyos Sr. Elementary School is located in a landslide prone area. This picture is facing east. Geographic Coordinates: N8 18 02.4 E126



Sheet flooding was observe along barangay site of Tagabayan, Rosario. Geographic Coordinates: N8 22 10.1 E125 58 05.1



Photo showing the flood height in Purok 4, Wasi-an.

VRA in San Jose, Prov. Of Dinagat Islands



Panoramic view of built up areas in San Jose, Dinagat



Drainage canals were installed along road sections of barangay Cuarinta, Dinagat

VRA in La Paz, Agusan del Sur



Located at Purok 1 of Brgy. Valentina, La Paz. Photo showing houses built along the cliff, it is susceptible to moderate to high landslide. Creeping was observed along the area, tilting of coconut trees are one of the indicator of the ground movement. Which mean the ground is slowly moving which can be trigger by heavy rains and cause extreme ground movement.



Located at Purok 1 of Brgy. Panangagan, La Paz. Photo showing the flood height (red line), estimated 5 meters, during the extreme flooding happened in the Municipality last January 19, 2017. Overflow and backflow of the Adgawan River, Mah-mah creek and Panangagan creek are the main cause of the flooding of the said area.



Flood height (red line) of about 5-6 meters in Purok 1 of Barangay Sabang Adgawan due to overflow of Adgawan, Agusan, and Hibong River during the Typhoon Auring on January, 2017. The ponding of water lasted for about 4 months according to anecdotal accounts from the local residents. The area falls under very high susceptibility to flooding.



Flood height (red line) of about 3-4 meters in Sitio Minduyog of Barangay Lydia due to overflow of Adgawan River during the Typhoon Auring on January, 2017. The area falls under the category of very high flood susceptibility.

Geohazard Survey & Assessment

Vulnerability and Risk Assessment (VRA)

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
LGU Assessed	12	12	100%
Reports & Maps Produced	12	12	100%

Updating of 1:10,000 Scale Geohazard maps as a Result of Changes due to Natural Calamities

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
LGU Assessed	1	1	100%
Reports & Maps Produced	1	1	100%

Detailed Sub-surface Assessment

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
LGU Assessed	1	1	100%
Reports & Maps Produced	1	1	100%

Detailed Sub-surface assessment was conducted in Dagohoy, Bohol.

CAPACITY BUILDING FOR GEOSCIENCES DIVISION PERSONNEL

As part of its continuing advocacy to capacitate technical personnel to further enhance their knowledge and skill in the performance of their tasks and/or promote their professional growth thru participation in seminars / conferences in their respective discipline, the following training programs were attended by staff of the division:

A. Analytical Laboratory Personnel

Title of Training Program	Organizer / Sponsor	Date of Program	Venue	Name of Attendees
1. Training Workshop on Understanding ISO/IEC 17025 for Testing and Calibration Laboratories	Mines and Geosciences Bureau	May 8-9, 2017	Icon Hotel, Timog, Quezon City	Cecilia L. Consuegra Jusrit Elvie B. Seguis
2. Seminar-Workshop on Practical and cost Effective Minimization in Disposal of Laboratory Chemicals and	Mines and Geosciences Bureau	April 4-8, 2017	Icon Hotel, North Avenue, Quezon City	Cecilia L. Consuegra Archielyn C. Nimez

Environmental Waste Workshop on Understanding ISO/IEC 17025 for Testing and Calibration Laboratories				
3. Seminar on Handling of All Reagents	Merck in cooperation with Krypton Resources, Inc	April 27, 2017	Hotel Tavern, Surigao City	Cecilia L. Consuegra Christie A. Apale Jusrit Elvie B. Seguis
4. 32 nd Philippine Chemistry Congress	Integrated Chemist of the Philippines	May 30, 2017 to June 2, 2017	Asturias Hotel	Cecilia L. Consuegra Christie A. Apale

B. Geology Personnel

Title of Training Program	Organizer / Sponsor	Date of Program	Venue	Name of Attendees
1. 2017 Geological Convention	Geological Society of the Philippines	December 13-14, 2017	Dusit Thani, Makati City	Janeth S. Aparri Claysterkim J. Plaoma Ralph Angelo B. Plaza Rubenar L. Cagubcob Beda Louie O. Cagampang
2. Training/ Seminar on Marine Geophysics	MGB Cental Office-MGSD	December 5-10, 2017	Eurotel Hotel, Clark, Angeles, Pampanga and bataan	Janeth S. Aparri Kate A. Boquilon Claysterkim J.. Plaoma
3. Training Program on Coastal Geology, Geohazards and Managament (Geocoast)	Korea Institute of Geoscience and Mineral Resources (KIGAM)	November 27 – December 1, 2017	KIGAM, Daejon, South Korea	Liza T. Pacete
4. CCOP 53 rd Annual Session – “The Role of Geosciences in Safeguarding our Environment”	Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)	October 16-19, 2017	Waterfront Cebu City Hotel	Romeo M. Dalodado

5.	BGR in cooperation with CCOP	September 18-28, 2017	Novotel Manila, Araneta Center, Quezon, City	Melvin A. Mantilla
6. Training on Lidar Flood Modeling and Mapping	The Phil-LIDAR I Program	September 11-14, 2017	UP, Diliman, Quezon City	Melvin A. Mantilla
7. Seminar-Training on Georesistivity Survey for Groundwater Resource Assessment of the DENR, Mines and Geosciences Bureau Regional Offices No. X and X and XIII	MGB Region I	October 9-13, 2017	Amaris Function Hall, Butuan City and Buenavista, Agusan del Norte	Elaine L. Galido Beda Louie O. Cagampang Rubenar L. Cagubcob Jaime L. Curada Ruben C. Roxas
8. Seminar-Workshop on Methodologies, Concepts, Tools and Best practices in the Conduct of Coastal Geohazards Assessment	MGB Central Office - MGSD	August 2-6, 2017	Subic Traveller's Hotel, Olangpo City, Zambales	Elaine L. Galido Kate A. Boquilon
9. Subsidence Hazard Assessment Training Workshop	Mines and Geosciences Bureau Regional Office No. II	June 14-18, 2017	GCT Farm and Resort, Enrile, Cagayan	Liza T. Pacete Rubenar L. Cagubcob Ralph Angelo B. Plaza
10. Seminar-Workshop on Groundwater Resource and Vulnerability Assessment	Mines and Geosciences Bureau	May 21-27, 2017	Coocon Boutique Hotel, Brgy. Lagging Handa, Quezon City	Elaine L. Galido Rubenar L. Cagubcob
11. Regional Planning on Operation LISTO	DILG R.O. 13	February 10, 2017	Prince Hotel, South Montilla, Boulevard, Butuan City	Liza T. Pacete
12. 2017 National Quadrangle Geological Mapping	Mines and Geosciences Bureau Regional Office No. II	February 5-11, 2017	Ninong's Hotel, East Washington, Legazpi City	Romeo M. Dalodado Melvin A. mantilla Ralph Angelo B.

Workshop				Plaza
13. Seminar-Sustainable Development of Mineral Resources for the Mining Sector of the Philippines	Japan Oil, Gas, Metals National Corporation (JOGMEC)	January 29, 2017	Manila	Romeo M. Dalodado
14. 2017 Geoscience Workshop	Mines and Geosciences Bureau	January 16-21, 2017	Lima Park Hotel, Malvar, Batangas	Romeo M. Dalodado Elaine L. Galido Melvin A. Mantilla Liza t. Pacete Kate A. Boquilon

CONDUCT OF INFORMATION, EDUCATION AND COMMUNICATION (IEC) TO LOCAL GOVERNMENT UNITS (LGUs)

The Geoscience Division participated and send personnel as resource person in RDRRMC-OCDD organized Pre-Disaster Risk Assessment (PDRA) seminar-workshop. Presentation on the role of DENR-MGB in Pre-Disaster Risk Assessment was delivered during the following events:

1. Workshop for the Development of the Manual of Operations (MOO) for the Regional Disaster Risk Reduction and Management Council (RDRRMC) on March 29-31, 2017 at Almont City Hotel, San Jose Street, Butuan City
2. One (1) Day Orientation on Pre Disaster Risk Assessment (PDRA) for the 9 Island Municipalities of Surigao del Norte on May 7, 2017 at Tavern Hotel, Surigao City
3. Pre Disaster Risk Assessment (PDRA) Orientation for 11 Mainland Municipalities of Surigao del Norte on May 12, 2017 at Almont Inland Resort, J.C. Aquino Avenue, Butuan City.

The 10K geohazard quadrangle maps were also maintained and made accessible for download at the MGB Region XIII website at the following portal link: <http://www.mgbr13.ph/index.php/gsd-3/10k-geohazard-provinces-quadrangle/>

Other geohazard IEC materials such as flyers, pamphlets and VCD's were also provided during the Environmental Month IEC caravan in the Provinces of Dinagat Islands, Surigao del Norte, Surigao del Sur and Butuan City and during the Geosciences Division Press Conference and Caraga Mining Symposium held in Philippine Gateway Hotel on October 5-6, 2017.

Two (2) landslide warning signages were installed in Barangay Central, Placer, Surigao del Norte and in Purok 1, Poblacion, San Jose, Province of Dinagat Island assessed as highly susceptible to rain-induced landslide.

GEOHAZARD OPERATION CENTER

The Geohazard Operation Center was operationalized during the occurrence of the February 10, 2017 Magnitude 6.8 earthquake in Surigao del Norte. Teams were organized to assess the extent of the damage from this event and includes assessments of infrastructures, earthquake-induced landslides and resulting slope instability and ground subsidence if any. Reports were generated and provided to the concerned LGU's and stakeholders affected by the earthquake.

A total of seventy two (72) DENR- MGB advisories on typhoon, tropical depression, low pressure areas were reissued.

COASTAL GEOHAZARD ASSESSMENT

For CY 2017, coastal geohazard survey was conducted in fourteen (14) municipalities of Caraga Region (Figure 2), namely:

1. Barobo, Surigao del Sur
2. Lianga, Surigao del Sur
3. Bislig, Surigao del Sur
4. Hinatuan, Surigao del Sur
5. Del Carmen, Surigao del Norte
6. Socorro, Surigao del Norte
7. San Jose, Province of Dinagat Islands
8. Libjo, Dinagat Island
9. Lingig, Surigao del Sur
10. Tubajon, Province of Dinagat Islands
11. Basilisa, Province of Dinagat Islands
12. Loreto, Province of Dinagat Islands
13. Cagdianao, Province of Dinagat Islands
14. Dinagat, Province of Dinagat Islands

Coastal Mapping and Assessment was conducted by mapping the shoreline using handheld GPS receiver which are superposed on old topographic maps to determine whether the shore is eroding or accreting. Beach profiling was also done at selected segments of the coast to determine the morphology and to compare beaches or coastlines in different locations. Erosion evidences such as exposed roots of vegetation in the area, eroded roads and infrastructure were also noted. Existing mitigating structural measures such as seawalls or groins to minimize

erosion rates were likewise mapped. Field assessment were supplemented by interview with the locals to gather anecdotal records on longer-term coastal erosion rates brought about by normal conditions (alternate *amihan* and *habagat* periods) as well as extreme weather events like the passage of storms or typhoons.

Representative pictures of the activity are given in Annex B.

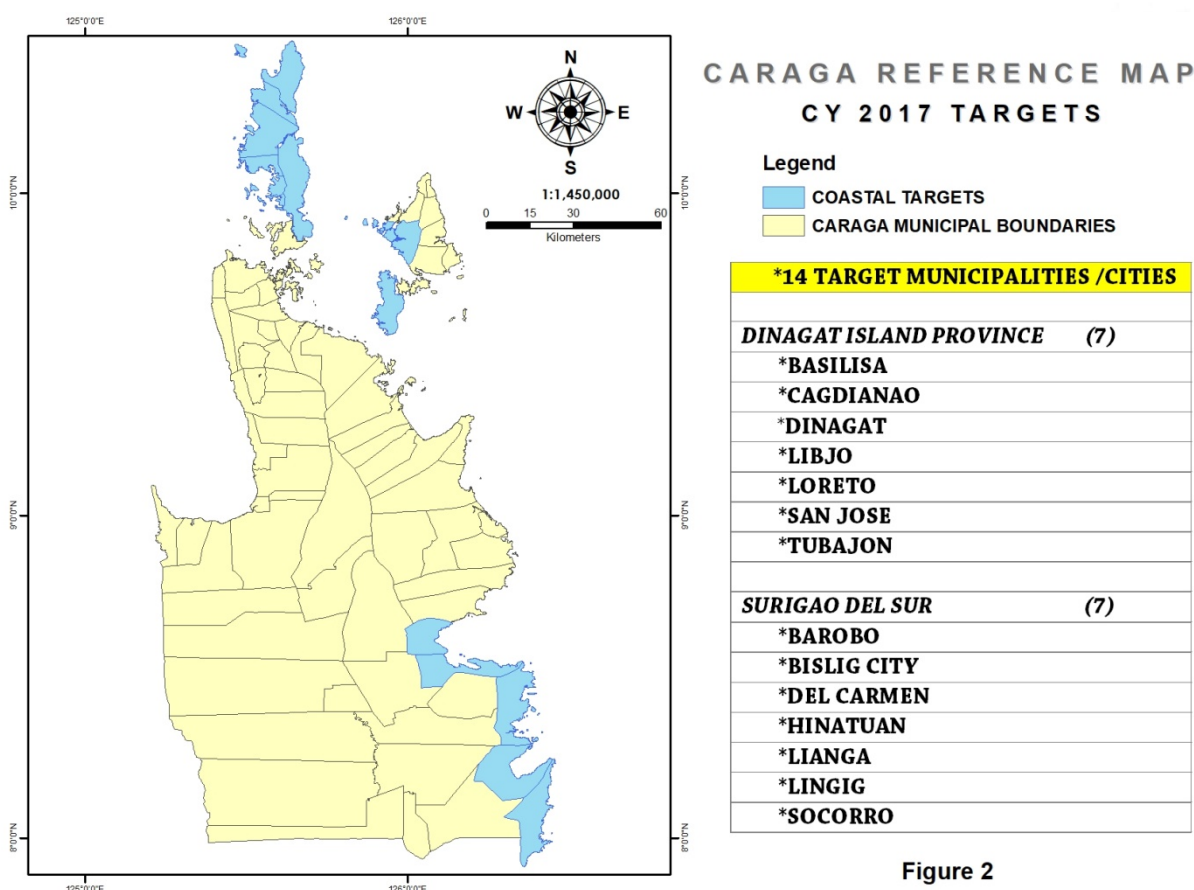


Figure 2

Coastal Geohazard Assessment

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
LGU Assessed	14	14	100%
Reports & Maps Produced	14	14	100%

Some pictures taken during the conduct of Coastal Geohazard Assessment:



Houses along the coast in Brgy. Gamut which aside from being prone to coastal hazards, are also prone to rock fall from nearby steep slopes. Located in Barobo, Surigao del Sur



A view of Talisay Seaside Elementary School near the mangroves area in Brgy. Poblacion which is prone to coastal hazards. Located in Barobo, Surigao del Sur

Barobo, Surigao del Sur

Houses within the mangroves area in Brgy. San Fernando which is prone to tidal flooding and storm surge.



Damages observed on the seawall along the coast in Brgy. Poblacion.

Bislig City, Surigao del Sur



Houses in Brgy. Tidman built beyond the seawall making them unprotected and vulnerable to coastal hazards.



Damages observed on the seawall in Brgy. Lacasa which are the effects of storm surges during typhoons that hit the area.

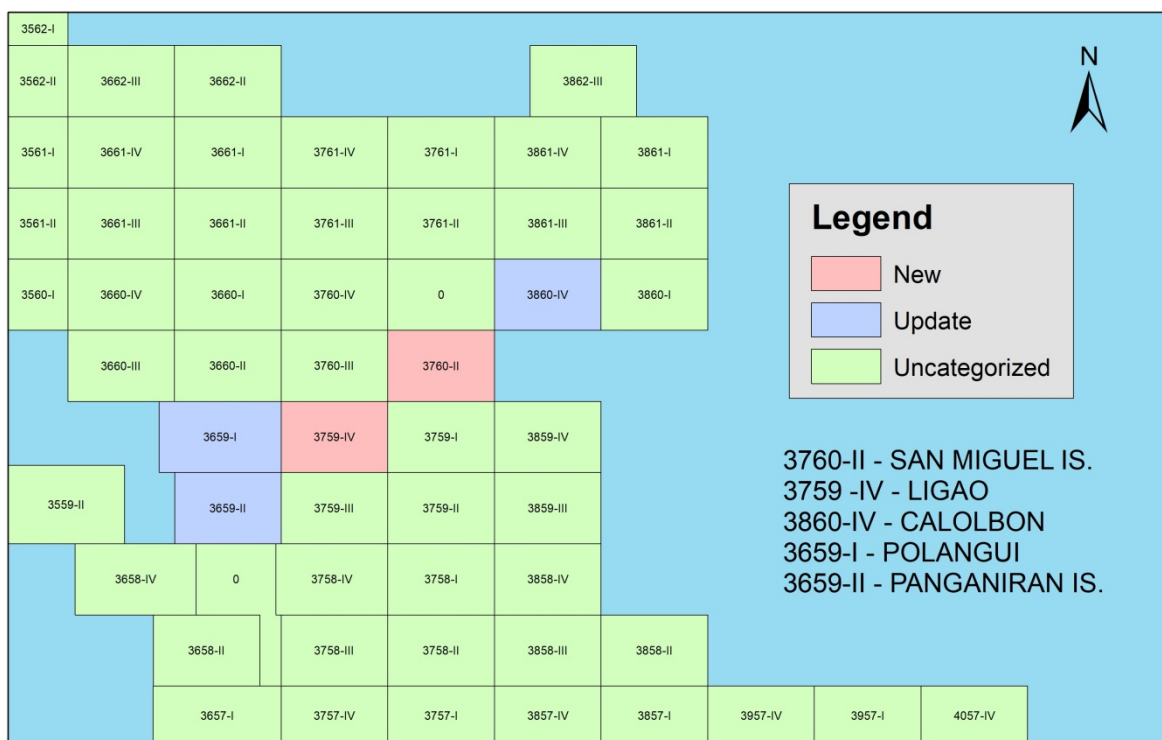
Hinatuan, Surigao del Sur

GEOLOGIC QUADRANGLE MAPPING

Geologic quadrangle mapping at 1:50,000 scale was undertaken in Region V, Bicol Region. Five (5) quadrangles were covered for this year namely: updating of the Polangui Quadrangle, Province of Albay and Camarines Sur and generation of new geologic map of Ligao Quadrangle, Panganiran Quadrangle, San Miguel Quadrangle within the Province of Albay and Calolbon Quadrangle, Province of Catanduanes

Selected photographs of the geological mapping highlights is provided in Annex D.

STATUS ON 1:50,000 SCALE QUADRANGLE GEOLOGICAL MAPPING TARGETS OF MGB XIII IN BICOL REGION



Geological Mapping

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
Area Surveyed	5	5	100%
Reports Prepared	5	5	100%

POLANGUI QUADRANGLE

Polangui Quadrangle (Map Sheet No. 3659-I) is bounded by the following geographic coordinates: 13° 10' 00" to 13° 20' 00" North latitudes and 123° 13' 00" to 123° 30' 00" East longitudes covering parts of the provinces of Camarines Sur and Albay in Bicol Region. It physiographically includes the southern half on the Bicol River Basin. The known formations in the quadrangle are, namely: Pantao Limestone (Eocene), Maonon Diorite (Late Oligocene), Tinalmud Formation (Early to Middle Miocene), Talisay Formation (Late Miocene to Early Pliocene), Polangui Volcanics (Late Miocene to Pleistocene), Ligao Formation (Pliocene to Pleistocene) and the Quaternary Alluvium.



A roadcut outcrop of 15-20 meter-thick volcanic breccia of Polangui Volcanic Complex located in Brgy. Pintor, Polangui. (GPS: coordinates: 123°29'56.48"E, 13°18'36.286"N)



Interbeds (and interlaminations) of sandstone and calcareous siltstone of Tinalmud Formation (previously known as Bicol Formation) located in Brgy. Tula Tula, Ligao.
(GPS coordinates: 123°28'54.979"E, 13°12'55.019"N)
Strike: N72W; Dip: NE; Dip Angle: 45



Outcrop of Polangui Volcanic Complex in Brgy. Sugcad, Polangui. Geographic Coordinate: 13° 18' 19.52"N 123° 29' 19.18"E



Collecting samples from limestone outcrop in from Brgy. Alliang, Ligao City. Geographic Coordinate: 13° 11' 53.36"N 123° 54' .34"E



Tilted interbedded sandstone, siltstone which are the clastics member of Talisay Formation exposed in Brgy. Tula-tula Grande, Ligao City. Geographic Coordinate: 13° 12' 55.2"N 123° 28' 55.1"E



Marly Limestone unit of Talisay formation exposed in Brgy. Pantao, Libon, Albay.

Geographic Coordinate: 13° 10' 17.61"N 123° 18' 32.67"E

LIGAO QUADRANGLE

Ligao Quadrangle (Map Sheet No. 3759-IV) is bounded by the following geographic coordinates: $13^{\circ} 10' 00''$ to $13^{\circ} 20' 00''$ North latitudes and $123^{\circ} 30' 00''$ to $123^{\circ} 44' 30''$ East longitudes covering the province of Albay in Bicol Region. It is adjacent to the Polangui Quadrangle and includes Mt. Masaraga and Mount Mayon. The known formations in the quadrangle are, namely: Maipon Metamorphics, Talisay Formation (Late Miocene to Early Pliocene), Polangui Volcanics (Late Miocene to Pleistocene), Bicol Volcanic Arc Complex (Pliocene to Quaternary) and the Quaternary Alluvium.



An outcrop of 10-15 meter-thick interbeds of calcareous siltstone (Malama Siltstone) of Talisay Formation underlying its limestone member located in Brgy. Oma Oma, Ligao. (GPS coordinates: $123^{\circ}30'16.79''\text{E}$, $13^{\circ}10'11.964''\text{N}$)

Ash to boulder size pyroclastic rocks of Mayon Volcanic Complex on the footslopes of Mt. Mayon situated within Brgy. 50 (Padang), Sto. Domingo. (GPS coordinates: $123^{\circ}43'57.76''\text{E}$, $13^{\circ}13'13.234''\text{N}$)



Outcrop of Malama Siltstone Member of Talisay Formation in Brgy. Batbat, Guinobatan. Geographic Coordinate: $13^{\circ} 8' 7.04''\text{N}$ $123^{\circ} 31' 8.26''\text{E}$



Aliang Siltstone disconformably capped by the Ligao Formation (Limestone). Outcrop exposed in Brgy. Oma-Oma, Ligao City. Geographic Coordinate: $13^{\circ} 10' 11.7''\text{N}$ $123^{\circ} 30' 16.9''\text{E}$

CALOLBON QUADRANGLE

Geologic Quadrangle Mapping at 1:50,000 scale was undertaken in Region 5. Calolbon quadrangle were covered by the survey for updating which was conducted from August 1-27, 2017.

CALOLBON QUADRANGLE

Calolbon quadrangle (Map Sheet 3860 IV) is bounded by the following geographic coordinates: 13° 30' 0" to 13° 39' 30" North latitudes and 124° 0' 30" to 124° 15' 00" East longitudes covering south of Catanduanes Province. Formations was observed on the area, namely Yop Formation at the northern part of the quadrangle and the Sto. Domingo Formation in the southern part.



View of limestone outcrop of Sto. Domingo Formation characterized by white to reddish bedded limestone. Exposed outcrop is located in Danicop, Virac, Catanduanes with geographic location 13° 35' 53.8" North latitude 124° 12' 48.4" East longitude.



Exposed outcrop shows dark color sedimentary conglomerate having clast of andesitic volcaniclastics and cross-cutting calcite veinlets and stringers. The observed outcrop falls under Yop formation located in Sitio Dakulan, Dugui San Vicente, Virac Catanduanes. Geographic coordinates 13° 39' 34.1" North latitude 124° 09' 07.3" East longitude.



Taking samples for analysis in exposed outcrop. Geographic location 13° 39' 45.0" North latitude 124° 08' 58.0" East longitude.

PANGANIRAN QUADRANGLE

The Panganiran Quadrangle (Map Sheet 3659 II) is bounded by geographic coordinates $13^{\circ} 00'$ to $13^{\circ} 10'$ North latitudes and $123^{\circ} 15'$ to $123^{\circ} 30'$ East longitudes consisting the Municipalities of Pio Duran, Oas, Libon and Ligao City, all in the province of Albay. It is generally characterized by a rugged topography with elevations ranging from mean sea level up to 500 masl.

Based on the available Geology of Bicol Region, the Panganiran Quadrangle is consists of different lithologies of varying ages. These are the a) Pre- to Late Cretaceous Ophiolites (*Panganiran Ultramafics*), b) Early Miocene to Late Eocene Diorites (*Panganiran Diorite*), c) Early to Mid-Miocene Bicol Formation, d) Tertiary Andestie flows (*Ragay Volcanics*), e) Early Pliocene to Late Miocene coralline, sandy, and marly limestone (*Albay Group Siltstone and Limestone*), f) Quaternary to Late Pliocene limestone (*Ligao Formation*), g) Quaternary Alluvium.



Fractured diorite outcrop (*Panganiran Diorite*) exposed along Basicao Coastal road cut in the municipality of Pio Duran, Albay. (N $13^{\circ} 02' 42.8''$, E $123^{\circ} 23' 52.9''$)

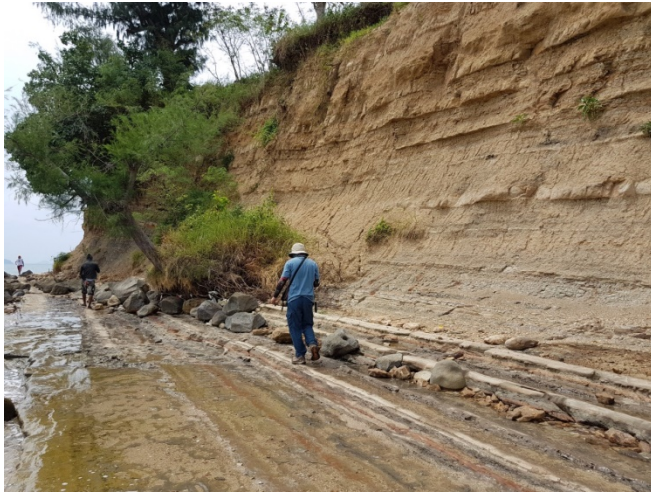


(A) Acid test performed in determining the calcareous content of the outcrop located at Agol Creek, Brgy. Santo Cristo. (B) strike and dip of the outcrop is N 53° E and 9° SE, respectively. (GPS Location: N $13^{\circ} 05' 29.4''$, E $123^{\circ} 30' 15.1''$)

SAN MIGUEL QUADRANGLE

The San Miguel Quadrangle (Map Sheet 3760 II) is bounded by geographic coordinates $13^{\circ} 20'$ to $13^{\circ} 30'$ North latitudes and $123^{\circ} 45'$ to $124^{\circ} 00'$ East longitudes. It consists of the entire San Miguel Island of Tabaco City, Albay Province, which the quadrangle was derived, and the northern Cagraray Islands of the municipality of Malilipot, Albay Province.

Based on the available Geology of Bicol Region, the geology of San Miguel Island and the northern Cagraray islands is generally consists of Pleistocene to Pliocene laminated ashy shales with interbeds of cinder sandstones and Eocene limestone which is locally recrystallized and fractured.



An outcrop about 4-6 meter-thick interbeds of calcareous siltstone and sandstone generally striking NW and dipping 12° NE. (GPS Location: N $13^{\circ} 24' 19.3''$, E $123^{\circ} 45' 45.2''$)



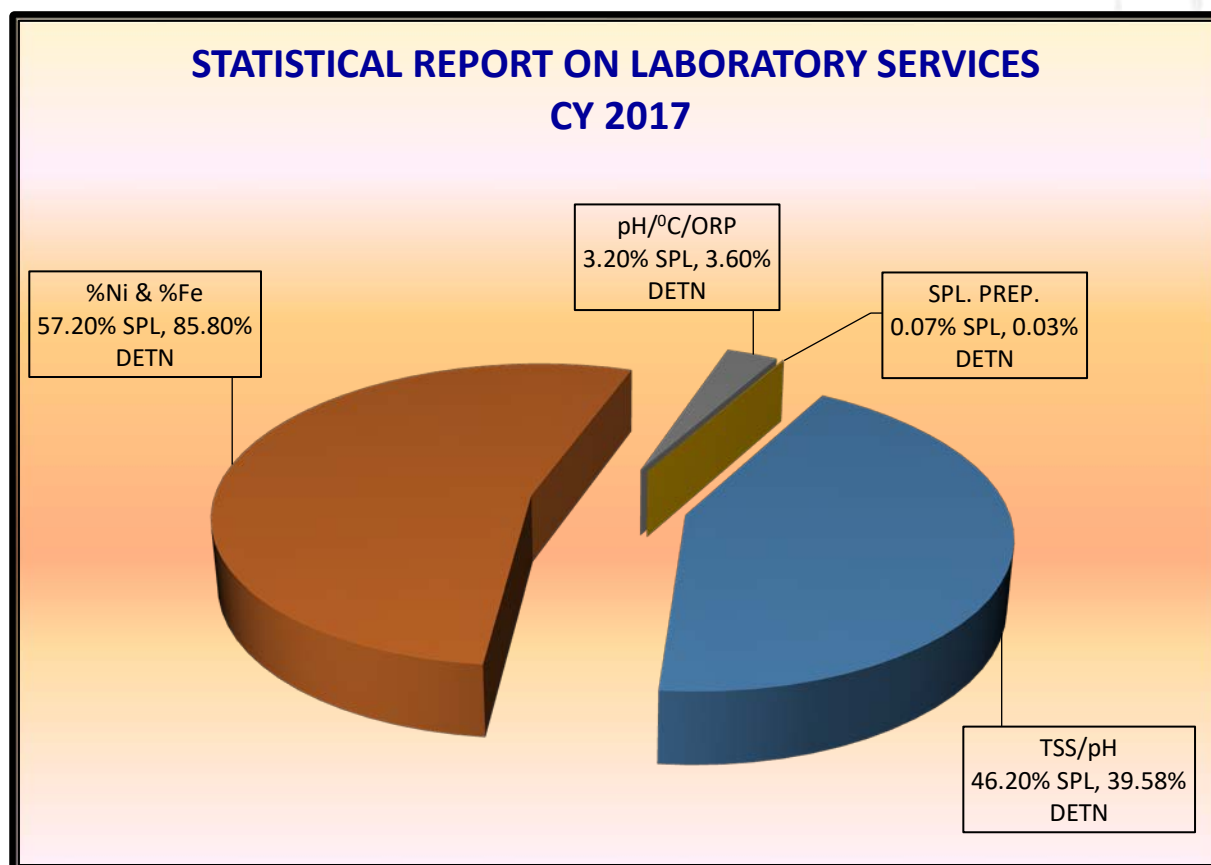
An outcrop of white to buff colored tuff(?) located along coast of Brgy. Sagurong with beds generally striking $N50^{\circ}$ E and dipping 70° NW. Localized normal faults were also observed cutting the outcrop (Note: sample pick for scale). GPS Location: N $13^{\circ} 23' 59.5''$, E $123^{\circ} 47' 26.6''$)

LABORATORY SERVICES

The Mines and Geosciences Bureau, Regional Office No. XIII, Surigao City Chemical Laboratory Services Section has provided laboratory / testing services on rocks, ores and minerals to determine content of gold, nickel, iron, chromite, manganese, among others. Moreover, MGB-XIII laboratory analyzes pH and Total Suspended Solids on water samples. Other services include Grain size analysis, Moisture analysis, True Specific Gravity and Sample preparation for walk-in clients.

This year, it has 106.67% and 129.00% attainment on the number of samples and number of determinations, respectively. Please find below the summary of laboratory analyses as follows:

ANALYSIS MADE	% SAMPLES	% DETERMINATIONS
TSS/pH	46.20	39.57
%Ni & %Fe	57.20	85.80
pH/ ⁰ C/ORP	3.20	3.60
Sample Preparation	0.07	0.03
TOTAL:	106.67	129.00



ANNUAL TARGET CY 2017: **1,500 SAMPLES / 40,000 DETERMINATIONS**

For CY 2017 revenues collected on paid samples amounted to **Php 161,940.00** and samples evaluated amounted to **Php 430,000.00**.

All nickel and iron analyses made were on pulp samples of nickel beneficiated ores taken from ore transport umpiring in nickel producing mining companies in Caraga.

Water samples submitted by mining companies in MGB-XIII Laboratory for pH and total suspended solids analyses were taken during MMT Inspection and for the Mining Companies' in-house quarterly water quality monitoring and assessment. Other water samples analyzed were submitted by students for their thesis studies.

MGB-XIII laboratory was involved in other MGB-13 programs/projects/activities especially on ore validation, mineral reservation and environmental resource mapping undertakings, and laboratory inspection in mining companies for their application with the PNP to purchase controlled chemicals to be used in their assay laboratories. Furthermore, the laboratory participated in the conduct of Vulnerability and Risk Assessment, Groundwater Resource Assessment and Hydrological and Hydrogeological study as requested by Krominco Inc. in Loreto Dinagat Islands.

This year, MGB-XIII ANALAB being one of the MGB Analytical Laboratories nationwide to undergo ISO/IEC 17025:2017 is preparing the requirements to pursue ISO/IEC 17025:2017 accreditation and at the same time took part in the preparation for ISO 9001:2015 certification.

Concerns:

The fume hood scrubber being indispensable equipment in the laboratory is still under repair for more than a year now. We are sure that this will greatly influence the realization of planned targets for CY 2018.

On November 8, 2017, Ms. Alhynn Tesorero, ISO/IEC 17025:2017 Consultant conducted a Preliminary Systems Appraisal (Gap Analysis). Findings and Recommendations include purchase of new laboratory equipment such as hot plate, sample preparation equipment, dust collection system etc., additional storage area for samples, chemicals and chemical wastes, among others.

Representatives from Professional Regulatory Board of Chemistry conducted Inspection of Chemical Establishment, a requirement to secure Certificate to Operate Chemical Laboratory on November 23, 2017. One of the findings and recommendations during the said inspection is additional personnel to perform chemical analyses since 2 Chem Eng laboratory personnel will not be allowed to do chemical analyses after April 2018 until they become registered Chem Techs. This is in compliance to Republic Act No. 10657 - IMPLEMENTING RULES AND REGULATIONS (IRR) OF Chemistry Profession Act.

-Please see attached Findings and Recommendations during the conduct of Preliminary Systems Appraisal and Inspection of Chemical Establishment conducted by Professional Regulatory Board of Chemistry

In addition, MGB-XIII ANALAB is hoping to acquire a new Laboratory instruments like X-Ray Fluorescence (XRF) Spectrometer that combines *highest* accuracy and precision with simple and fast sample preparation for elemental analysis of ores to fast track its backlog of samples that is free from negative environmental impacts due to fumes emitted during the sample analysis process.

Challenges for CY 2018

The MGB-13 ANALAB took part in the ISO 9001:2015 undertaking and at the same time the intent of pursuing ISO/IEC 17025:2017 accreditation is ongoing. The MGB-XIII ANALAB gave its commitment to standardize and improve its services to comply with the requirements of (FDIS) ISO/IEC 17025:2017 International Standards on or before May 2018.

PHOTOS OF LABORATORY ACTIVITIES FOR CY 2017:

Ore Stockpile Validation:



July 31, 2017 at SR Metals Inc. - Nickel and Iron analyses of nickel ore samples taken during the conduct of Ore Stockpile Validation at Claver Mineral Development Corporation.

Vulnerability and Risk Assessment:

Assisted Geologists in the evaluation of flood and landslide prone areas and data collection of demographic information



Ground Water Resource Assessment:



Water sampling and water quality analysis at Loreto, Province of Dinagat Islands

Hydrological and Hydrogeological Study:

Assisted Geologist in the conduct of hydrological and hydrogeological study at Krominco Inc., Province of Dinagat Islands



ISO/IEC 17025:2017 Preliminary Systems Appraisal (Gap Analysis):



TRAININGS AND SEMINARS ATTENDED:



Five-day Training Workshop on Practical and Cost-Effective Minimization and Disposal of Laboratory Chemical and Environmental Waste held on April 4 to 8, 2017 at Icon Hotel, North Avenue in Quezon City



Seminar on Safe Handling of All Reagents as an Environmental Support conducted by MERCK at Tavern Hotel, Surigao City on April 27, 2017



Training Workshop on Understanding ISO/IEC 17025 for Testing and Calibration Laboratories held on May 8 to 9, 2017 at ICON Hotel, Timog Avenue, Quezon City



32nd Philippine Chemistry Congress on May 30 to June 2, 2017 at Asturias Hotel, Puerto Princesa City, Palawan



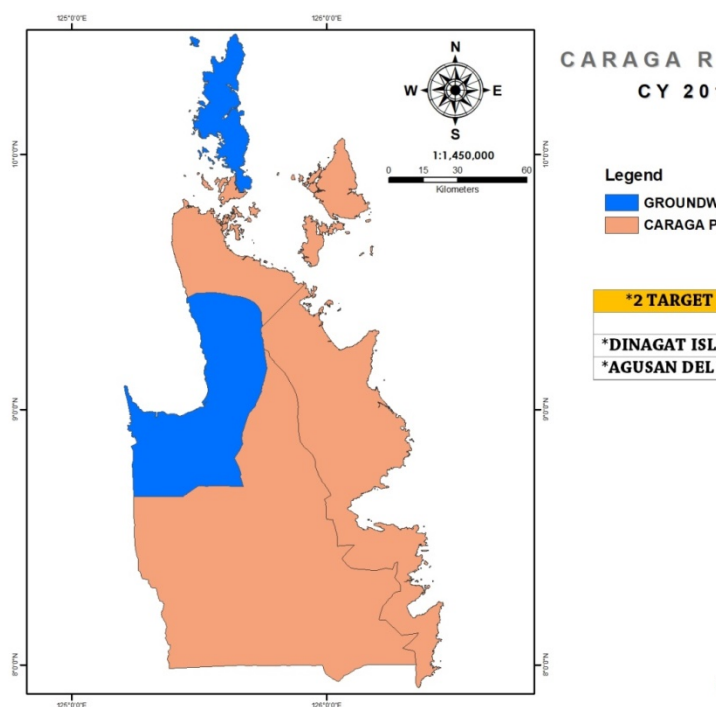
Two-day hands-on training on the use of In-Situ multiparameter water quality field meter (SmarTroll) held last July 5 to 6, 2017 at Mines and Geosciences Bureau-Central Office, North Avenue, Diliman, Quezon City

GROUNDWATER RESOURCE ASSESSMENT

Two (2) Provinces of Caraga Region are the target of the Groundwater Resource Assessment program for this year namely the Province of Agusan del Norte (Tier 1) and the Province of Dinagat Islands (Tier 2). The Office duly accomplished the conduct of groundwater resource assessment of the twelve (12) LGU's of Agusan del Norte namely: Buenavista, Butuan City, Cabadbaran City, Jabonga, Kitcharao, Magallanes, Las Nieves, Carmen, Santiago, Nasipit, R.T. Romualdez and Tubay while under Tier 2, (7) LGU's of Dinagat Islands were covered namely: Basilisa, Cagdianao, Dinagat, Libjo, Loreto, San Jose and Tubajon (Figure 3).

It is envisioned that the output of this activity in the form of groundwater resource report, maps, and database will have a long-term impact in the delineation and identification of potential high water-yielding and good quality aquifer and water sources that could be tapped in the future by the LGU in response to climate change and increasing population and industrialization of communities.

Pictorials of the groundwater resource assessment activities are attached in Annex C.



Groundwater Resources Assessment

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
LGU Assessed (Province)	2	2	100%
Reports w/ Maps Prepared	2	2	100%

Some of the pictures taken during the conduct of Groundwater Resources Assessment in the Provinces of Dinagat Islands & Agusan del Norte.



Buenavista, Agusan del Norte

Taking of water samples in Brgy. Abilan Purok 3. The deep well having a depth of 48.7 meters is the primary source of potable water in residence of Purok 3. Geographic location 8° 58' 05.0" north latitude 125° 27' 48.2" east longitude.



Butuan City

Separate spring type potable water source located at Purok 6 of Brgy. San Mateo. The left intake box supplies the whole barangay of San Mateo and is a project initiated by the barangay. The right intake box also supplies the Brgy. San Mateo and some portions of Brgy. Tungao and is a project by Brgy. Tungao. According to anecdotal accounts, the right intake box was previously a pump type (to reach higher portions of the barangay) intake box but wasn't persisted due to inability of the local residents to pay. Due to the dilemma, the locals decided to construct a tub near the water source for other residents to tap.



Basilisa, Province of Dinagat Islands

Water source in Purok 5, Brgy. Diegas, Basilisa is a spring enclosed by concrete box and supplies Puroks 3, 4 and 5. According to residents, they experience low discharge of water especially during summer.

KARST SUBSIDENCE HAZARD ASSESSMENT AND GROUND PENETRATING RADAR (GPR) SURVEY

Mines and Geosciences Bureau Regional Office XIII is assigned to conduct the Karst Subsidence Hazard Assessment and Ground Penetrating Radar (GPR) Survey in the Municipality of Dagohoy, Bohol Province. The team is composed of five (5) personnel namely: Liza T. Pacete (Senior Geologist), Kate A. Boquilon (Senior Geologist), Ralph Angelo B. Plaza (Geologist II), Dionesio A. Surigao (Geologic Aide) and Felix B. Adolfo (Core Driller/Driver). The team is also assisted by the Local Government Unit of Dagohoy headed by the Municipal Mayor Sofronio C. Apat Sr., MDRRMO, MPDO and staff, barangay officials of the fifteen (15) barangays and the local residents who responded on the interviews. The assessment was conducted on October 9-31, 2017.

The assessment confirms about 69.28% of the land area of the Municipality of Dagohoy is highly susceptible to subsidence hazard (see **Figure 1. Subsidence Hazard Map**). The hazardous areas are underlain predominantly by karstic rock formations such as the Maribojoc Formation on the westernmost portion of Dagohoy including the barangays Can-oling and Villa Aurora and the relatively low-lying portion including the barangays of Poblacion, Candelaria, Caluasan, San Miguel, Babag Malitbog, Mahayag, Sta. Cruz and San Vicente of which are underlain by the Carmen Formation. Based on the conducted assessment there are 84 sinkholes located through IfSAR -DEM, topo map, ground penetrating radar and geological/geomorphological assessment. Infrastructures or government facilities that are sitting on and/or near sinkholes include Dagohoy National High School, Dagohoy Central Elementary School, Malitbog Elementary School, Can-oling Elementary School, Villa Aurora Elementary School, Dagohoy Municipal Hall, Dagohoy Training Center and also the proposed Sanitary Land Fill in Barangay Can-oling. GPR radar grams also confirm the sinkholes and caves underneath have indicated that subsidence is still active because of tension cracks.

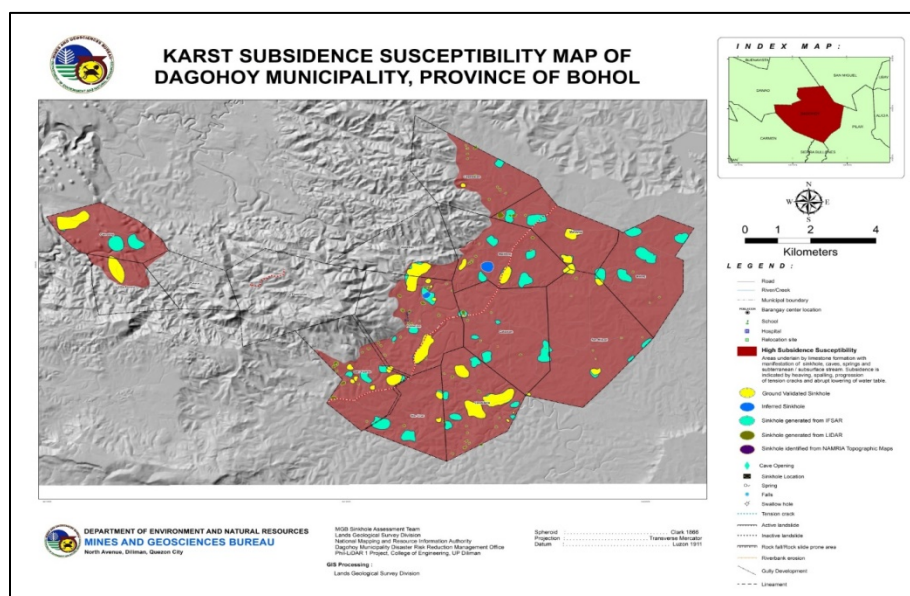


Figure 1. Karst Subsidence Hazard Map of the Municipality of Dagohoy, Bohol.

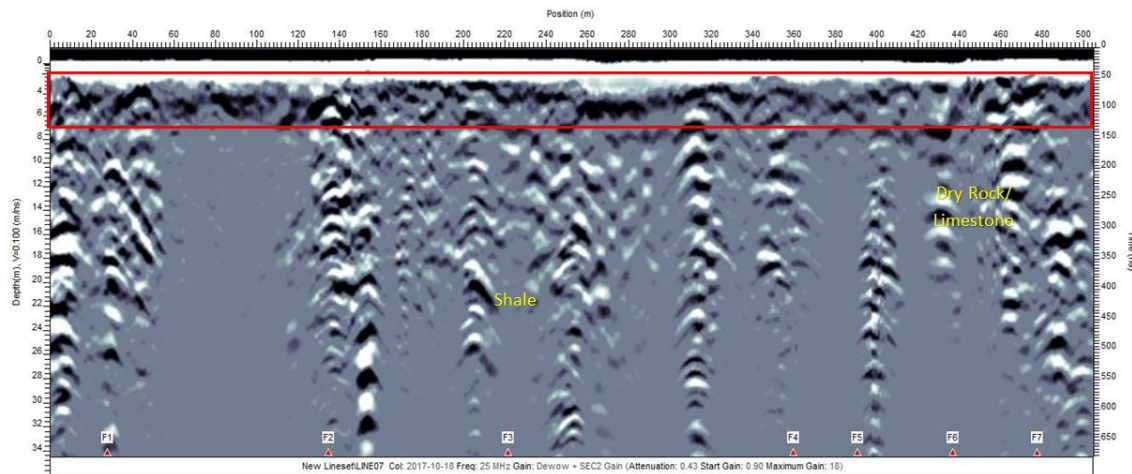


- A.** Solution Sinkhole in Purok 4, Brgy. Poblacion
- B.** Cover Collapse Sinkhole in a Rice Field in Brgy. Poblacion
- C.** Cover Subsidence traversing in Calceta St., Poblacion; tension cracks on road surface
- D.** Ponding due to subsidence in Purok Ilang-ilang, Brgy. San Miguel
- E.** Ponding due to subsidence in Brgy. Babag
- F.** Cracks on pathway of Can-Oling Elementary School; possible void/cavity underneath

*** Result of Sinkhole Inventory**

Barangay	Number of Sinkhole				Size Range of Aperture (meter)	
	Geological Assessment	IfSAR	NAMRIA	Total	Geological Assessment	IfSAR Depth Range 0.5-3 meters
Babag	1	4	-	5	0.5-50	200-400
Cagawasan	1	1	-	2	1-20	70-900
Cagawitan	3	2	-	5	10-100	180-900
Caluasan	0	5	1	6	-	80-600
Candelaria	15	6	-	21	10-300	200-750
Can-Oling	6	2	1	4	1-500	350-850
Estaca	0	0	-	0	-	150-1000
La Esperanza	0	0	-	0	100-200	150-1200
Mahayag	7	3	-	10	-	250-700
Malitbog	12	5	-	17	20-100	300-600
Poblacion	28	4	-	32	0.5-1000	200-300
San Miguel	2	3				
San Vicente	6	5				
Sta. Cruz	0	3				
Villa Aurora	3	0	-	1	2-100	-
Total	84	43	2	134		

* Sample Radargrams generated by the) PulseEKKO Pro Ground Penetrating Radar (GPR)

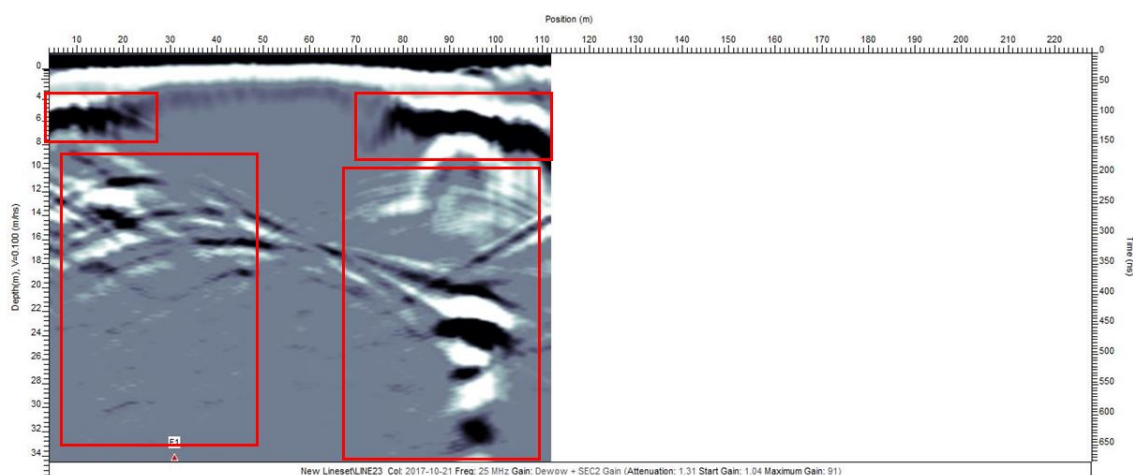


J.A. Clarin St. (Line 1 of 2)

Maximum depth of penetration: 35 meters
meters

Survey line length: 505

A GPR survey line was established on J.A Clarin St. starting near the national highway going to T. Balud St. The surveyed line is bombarded with numerous cave systems and interconnected voids/cavities with depths varying from 3 meters up to 7 meters. Some noises were also detected due to interference of radio wave signals coming from radios and/or televisions from the residential houses adjacent to the street. Ponding of water on ground depressions were also noted. Nonetheless, it is still clearly illustrated in the image that the area is mainly underlain by large and small caves systems and voids/cavities and minor fractures/and or displacements.



Proposed Training/Multipurpose center in Brgy. Caluasan

Maximum depth of penetration: 35 meters

Survey line length: 111 meters

A GPR survey line was established on the proposed training/multipurpose center in Brgy. Caluasan starting from the southwest building going northeast. Two (2) cave systems were noted during the survey, one starts near the southwest building extending up to 28 meters and the other cave system starts around the 75-meter line up to the end of survey line which may extend further northeast. Cave system identified varies its depth around 5-8 meters and 5-11 meters respectively. Several displacements were also detected.

MISCELLANEOUS GEOLOGICAL SERVICES

A total of twenty five (25) geological services were provided to various clienteles during the year in review. This could be further categorized based on purpose as follows:

Geohazard Identification Survey

As one of the mandatory requirement for securing an Environmental Clearance Certificate for housing projects and, optionally, other land development projects as deemed applicable by the Environmental Management Bureau (EMB), Geohazard Identification Survey (GIS) was conducted on the following proposed sites:

Name of Project	Proponent	Location
1. Marrea Homes Subdivision	Marrea Estate Corporation	Brgy. Cagbas, Bayugan City, Province of Agusan del Sur
2. N.H.A. Sta. Josefa Tribal Village	LGU Sta. Josefa, Agusan del Sur	Purok-8, Sitio Tagmaruno, Barangay Sayon, Sta. Josefa, Agusan del Sur.
3. IP Housing Project under National Housing Authority (NHA)	LGU Prosperidad, Agusan del Sur	Brgy. Aurora, Prosperidad, Agusan del Sur
4. Camella Butuan Phase 5	Land Use Conversion/Development and Environmental Consultancy	Brgy. Villa Kananga, Butuan City
5. Tandag City Memorial Garden	Hon. Vicente T. Pimentel, Jr., Provincial Governor, Surigao	Purok Pag-asa I, Barangay Rosario, Tandag City, Surigao

	del Sur	del Sur
6. Marie Louise Subdivision	Hon. Vicente T. Pimentel, Jr., Provincial Governor, Surigao del Sur	Sitio Tapo, Barangay San Isidro, Tandag City, Surigao del Sur
7. Socialized Housing Project	Kaugmarin Homedev, Inc.	P-4, Brgy. Manapa, Buenavista, Agusan del Norte
8. Green East Surigao Subdivision	Landreal Corporation	Brgy. Poctoy, Surigao City, Surigao del Norte
9. VCDU-Riverdale Subdivision	VCDU	Brgy. Libertad, Butuan City, Agusan del Norte
10. Socialized Housing Project	Kaugmarin Homedev, Inc.	Brgy. Ambago, Butuan City, Agusan del Norte
11. Camella Agusan del Sur	Land Use Conversion/Development and Environmental Consultancy	P-2, Brgy. Sta. Teresita, Bayugan City, Agusan del Sur
12. Camella Homes Butuan Phase 6 & Phase 7	Land Use Conversion/Development and Environmental Consultancy	Brgy. Villa Kananga, Butuan City, Agusan del Norte
13. Terra Verde Subdivision	VCDU	Brgy. Libertad, Butuan City, Agusan del Norte

Solid Waste Disposal Site Suitability Assessment

As part of its technical support to the Environmental Management Bureau in evaluating the geological site suitability of proposed solid waste disposal sites prior to issuance of Notice to Proceed (NTP), Five (5) proposed sanitary landfill (SLF) / ecological solid waste management park (Eco-SWM Park) projects were assessed by the Office namely:

Name of Project	Proponent	Location
1. Sanitary Land Fill	Municipality of Santiago	Brgy. Curva, Santiago, Agusan del Norte
2. Sanitary Land Fill	Municipality of Alegria	Brgy. Julio Ouano, Alegria, Surigao del Norte
3. Eco-Solid Waste Management Park	Municipality of San Francisco	Brgy. Honrado, San Francisco, Surigao del Norte
4. Sanitary Land Fill	Municipality of General Luna, Siargao Island, SDN	Sitio Amindang, Brgy. Corazon, General Luna, Siargao Island, SDN
5. Eco-Solid Waste Management Park	Libjo Mining Corporation	Sitio Balite, Brgy. San Antonio, Libjo, Province of Dinagat Island
6. Sanitary Land Fill	Platinum Group Metals Corporation- Cagdianao Nickel	Sitio Kinalablaban, Brgy. Cagdianao, Claver, SDN

	Project	
7. Sanitary Land Fill	Municipality of Carrascal, Surigao del Sur	Sitio Quiyaoyawan, Brgy. Bon-ot, Carrascal, Surigao del Sur

Geohazard Assessment in Response to the 6.7 Magnitude Earthquake that Occurred due to movement of the Surigao Segment of the Philippine Fault on February 10, 2017.

Five (5) reports were generated to assess the damage and consequent risks posed after the occurrence of the main shock and numerous aftershocks of the earthquake. These reports are as follows:

1. Geohazard Spot Report on M6.7 Surigao Earthquake
2. Report on Landslide Assessment following the M6.7 Earthquake In Surigao City
3. Geohazard Assessment In the Reported Landslide at Purok13 at Sitio Pinaypayan, Mat-I, Surigao City
4. Report on Geohazard Assessment following the M6.7 Earthquake In Surigao City
5. Report on the Geohazard Assessment at Almont Beach Resort, affected by M6.7 Earthquake and Its Aftershocks

Geohazard Certifications

A total of eighty three (83) geohazard certifications were issued upon the request of Provincial / Local Government Units, National Line Agencies and schools for their proposed projects like construction of Farm to Market Road, Office / school buildings and eco-tourism sites. Geohazard certifications for proposed relocation/resettlement sites were also catered for budgetary purposes only since areas greater than one (1) hectare or if it has no Certificate of Non-Coverage for ECC from Environmental Management Bureau is still subject for Geohazard Identification Survey.

Other Geological-related Assessments

A Hydrogeological and Hydrological Study was conducted specifically on one of the watersheds in Loreto, Province of Dinagat Islands in relation to the Sangay-2 ore reserve of Krominco, Inc. with tenement reference MPSA 291-2009-XIII-SMR.

MLA

**20
17**

PHISICAL ACCOMPLISHMENT

Mineral Lands Administration

The Mineral Lands Administration has two major components namely;

1. Mineral Investment Promotion Program (MIPP); and
2. Mineral Industry Development Program (MIDP).

MIPP activities are the issuance of mining contracts/permits including areas within mineral reservations and other related permits which also have the following programs, to wit;

1. Issuance of Mining Permits;
2. Use It or Lose It Policy and Review of the Performance of Existing Mining Operations per EO no. 79;
3. Approval of SHES Program; and
4. Measures to Improve Small-Scale Mining per EO 79.

MIDP focuses on the monitoring and enforcement activities which also have the following components, to wit;

Mining Industry:

1. Monitor/audit of approved mining contracts/permits including areas within mineral reservations as to compliance to the implementation of approved Work Program and Safety, Health, Environment and Socials Programs; and
2. Full Enforcement of Env't'l Standards in Mining Operations pursuant to EO no. 79:
 - A) Safety, Health, Environment and Socials Programs
 - B) Strengthen Multi-Partite Monitoring System

Enforcement:

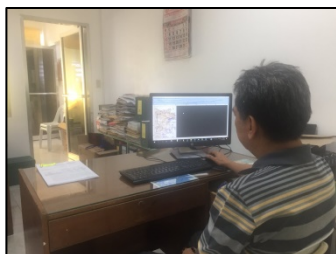
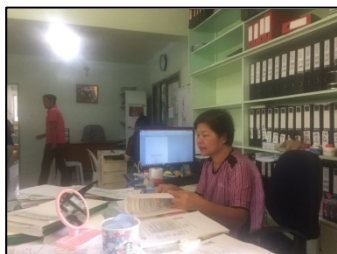
1. Resolution of Complaints/Cases /Conflicts; and
2. Anti-Illegal Mining.

Issuance of Mining Permits

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
OTP/Certification	420	943	225%
<i>OTP</i>	<i>320</i>	<i>665</i>	<i>208%</i>
<i>Certification</i>	<i>100</i>	<i>278</i>	<i>278%</i>
Others (Accreditations, CEMCRR/CoE, DMPF for RO-issued MPP)	6	6	100%
MOEP	260	615	237%

Overview

Issuance of permits like OTP and/or MOEP and Certificate to Transport Samples were undertaken by Mine Management Division (MMD) of the Mines and Geosciences Bureau Regional Office XIII to legally transport minerals/ores/mineral products/and by products, including samples.



Left photo shows personnel of the Office reviewing an application for Ore Transport Permit.

Right photo shows personnel of the Office preparing for a Certification to Transport Sample.

Outcome

For CY 2017, MMD had issued 665 Ore Transport Permits, 615 Mineral Ore Export Permits and 278 Certificates to Transport Sample or 208%, 237% and 278%, respectively, based on targets. Also, the Division had endorsed one (1) application for Declaration of Mining Project Feasibility, had approved one (1) application f

Challenges

For the year, MMD had encountered challenges on the issuances of Permits/Contracts primarily on the issuance of Ore Transport Permits and/or Mineral Export Permits. One of the challenges is the absence of database/system and/or computer software for standardizing records in the issuance of the said permit.

Actions Taken

Momentarily, the Division had developed database via Microsoft Excel and already submitted proposal to the IT personnel of the Office to develop a computer Software. Also, the Issuance of OTP is one of the processes of the Office which was applied for ISO Certification.

Use It or Lose It Policy

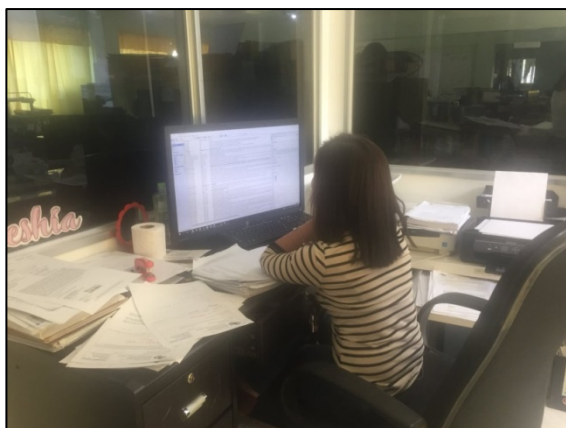
Use it or Lose it Policy program was designed to closely monitor all mining applications in terms of its compliance in all mandatory requirements according to RA 7942 also known as the Philippine Mining Act of 1995. Additionally, a review of the performance of existing mining operations per EO no. 79 was also regularly conducted focusing on the performances of approved mining rights in terms of its compliance as stipulated on its Environmental Work Programs and Exploration Work Programs and other policies related to its mining activities or operation.

The table below will show the CY 2016 accomplishment.

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
Mining applications with final action	7	7	100%
Mining Permits/ Contracts reviewed/ endorsed for Cancellation	62	62	100%

Lists of Mining Applications with Final Actions:

COMPANY	REMARKS
Villagold Mining Corp.	Denial Order
Project United Mining Corp.	Denial Order
Camarines Norte Finest Min. Inc.	Denial Order
Audrez Corp.	Denial Order
Magaurum Devt. Corp.	Denial Order
Cessmag Devt. Inc.	Denial Order
Asiga Mining Corp.	Denial Order



Outcome

For CY 2017, MMD had forwarded denial order to seven (7) Applications for Mineral Production Sharing Agreement and had reviewed sixty-two (62) mining permits/contracts which both accounted 100% accomplishments based on targets.

Photo shows personnel of the Office reviewing the Mining Tenement Statistical Report (MTSR).

Approval of SHES Program

As one of the mandatory requirements, each operating mining companies are required to submit its operation plan in terms of Safety, health, Environment, and Social plans, activities and programs. Such planning tools are needed to be reviewed and approved.

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
EPEP/FMRDP/PEIR endorsed to MRFC (no.)	1	4	400%
Annual EPEP approved	22	24	109%
SDMP/CDP approved	2	6	300%
Annual SDMP approved	22	27	123%
Annual Safety and Health Programs approved	57	47	82%
Environmental Work Program endorsed to MMD	5	5	100%
CMP approved	5	8	160%
NGP Monitoring Reports Submitted	4	4	100%

ENVIRONMENT SECTION

ACCOMPLISHMENTS

For CY 2017, the Environment Section was involved in the following activities:

1. Endorsement of EPEP/FMRDP to the Contingent Liability and Rehabilitation Fund Steering Committee (CLRF-SC)
2. Evaluation and Approval of the Annual Environmental Protection and Enhancement Programs (AEPEP) of operating mines and Care and Maintenance Programs (CMP) of non-operating mines
3. Endorsement of Environmental Work Program (EWP) of exploration companies to the Mine Management Division
4. Submission of Integrated Report on the National Greening Program (NGP)
5. Integrated Safety and Health, Environment and Social Development (ISHES) Monitoring
6. Verification of Mine Wastes/Tailings
7. Monitoring on the Implementation of the AEPEP with the Multipartite Monitoring Teams of every mining companies
8. Monitoring of the Implementation of the Mining Forest Program (MFP)

SOCIAL DEVELOPMENT SECTION

ACCOMPLISHMENTS

For CY 2017, the Social Development Section was involved in the following activities:

1. Evaluation and Approval of the Five-Year Social Development and Management Programs (SDMP) of operating mines and Two-Year Community Development Programs (CDP) of exploration companies
2. Evaluation and Approval of the Annual Social Development and Management Programs (SDMP) of operating mines and Annual Community Development Programs (ACDP) of exploration companies
3. Semi-Annual Monitoring and Validation on the implementation of the Annual Social Development and Management Programs (SDMP) of operating mines
4. Annual Monitoring and Validation on the implementation of the Annual Community Development Programs (ACDP) of exploration companies
5. Integrated Safety and Health, Environment and Social Development (ISHES) Monitoring

Table 2 below shows the Annual Accomplishments of Social Development Section for the above mentioned activities, against the target.

Monitoring/Audit as to Compliance to the Approved Program			
SDMP 2 nd Semester 2016 Validation/Monitoring (no.)	54	54	100%
CDP Monitoring (together with ISHES)		20	

OTHER INITIATIVES

In partnership with the mining consultants and mining companies in the region, the Social Development Section facilitated and conducted the following seminars, trainings and workshops:

1. Cross-Sectoral Forum on Social Development and Management Program (SDMP) last January 12, 2017 at the Philippine Gateway Hotel, Grand Convention, Surigao City. This is in line with the Regional Director's directive on the strengthening of policies and enhancement of procedures in the implementation of the Social Development and Management Program (SDMP). The Community Relations Officers (CROs) and the Representatives of the Host and Neighboring Communities (RHNC), and other concerned stakeholders from different mining companies all over Caraga were gathered together to attend the forum with the theme "SDMP for Integrated Sustainable Development". Almost Three Hundred (300) participants have attended the aforesaid forum.
2. Three-day Training on SDMP and Participatory Project Planning at the Parklane International Hotel, Cebu City last August 18-20, 2017. It is aimed at making the implementation of SDMP more systematic and sustainable and giving more emphasis to the livelihood component of the program. The activity was conducted by MGB 13 in cooperation with the Community Relations, Education and Development Officers Organization (CREDO) Caraga, Inc. and facilitated by Dr. Rolando Cuaño and Ms. Marita Cuaño of BMP Environment and Community Care, Inc. It was participated by the Community Relations Officers, Community Organizers and MGB 13 SDMP personnel.
3. SDMP Roll-Out at the Parklane International Hotel, Cebu City last Nov. 1-2, 2017. It involved consultation and reorientation of the key players in the implementation of the Social Development and Management Program (SDMP). The activity tackled the development partnerships, the target beneficiaries of SDMP, the SDMP Framework for Caraga and the Social Impact Assessment/Performance Review of SDMP. The facilitators gave emphasis on ensuring the sustainability of SDMP projects especially on livelihood programs. The inputs of DILG Officer also highlighted the activity especially that most of the participants were Barangay and Municipal LGU Officials. Some company officials like Resident Mine Managers and ComRel Managers attended the event.

4. Press Conferences conducted on March 31, 2017 (1st), June 30, 2017 (2nd), October 5, 2017 (3rd) and December 15, 2017 (4th). The following topics were given emphasis:

- a. Caraga Mining Companies: To the Rescue! 6.7 Magnitude
- b. Social Development and Management Program: Caraga Experience
- c. The State of Caraga Mining Industry
- d. Environmental Protection and Enhancement Program (EPEP) of Surigao del Norte Mining Companies
- e. Importance of Mining
- f. Mines and Geosciences Bureau-Geosciences Division (MGB-GSD) Functions and Services
- g. Platinum Group Metals Corporation (PGMC) Emergency Response Program
- h. Beyond Borders TMC extends help to 6.5 magnitude quake that hit Leyte
- i. Greenstone Resources Corp. (GRC) Open Pit Mining Method
- j. A Study of of Acid Mine Metal Leaching (AMD-ML) and Mining-Influenced Waters (MIW) in Philippine Copper Porphyry Projects
- k. Silangan Mindanao Mining Company, Inc. (SMMCI): Open Pit Project

5. SDMP Manual of Operations (MOO)

This Manual of Operation (MOO) is formulated and adopted for the effective implementation of the Social Development and Management Program and Community Development Program. The day-to-day functional implementation of this MOO is the responsibility of the Mines and Geosciences Bureau-Regional Office XIII, Mining Companies, Mineral Processing Plants, Mining Communities and all stakeholders involved.

The purpose of this MOO is to serve as a reference tool in decisions involving the management and implementation of SDMP and CDP wherein established guidelines and policies must be strictly followed by all concerned stakeholders. This describes the standards and procedures in the preparation, formulation and implementation, and evaluation of SDMP/CDP in CARAGA by concerned mining companies and mineral processing plants.

This MOO has the following objectives:

1. To set and give specific strategic direction for the effective and successful implementation of SDMP/CDP by providing precise guidelines in the preparation and formulation of SDMP/CDP.
2. To identify the specific credited Projects/Programs/Activities (P/P/As) of SDMP/CDP.
3. To institutionalize internal and external safeguards and procedures to standardize and strengthen existing control in the handling of funds intended for SDMP/CDP projects to preclude misuse of funds.
4. To promote profitability and sustainability for all livelihood projects of SDMP/CDP on the host and neighboring communities.

Below are some photos to support the accomplishments for CY 2017:



RD Roger A. De Dios giving his message to the participants of the Cross-Sectoral Forum on SDMP on January 12, 2017 at Gateway Hotel, Surigao City with more or less 300 participants.



Mr. Jojo Thairon Tacumba of Greenstone Resources Corporation discussing the operation of the company specifically the open pit mining method during the Press Conference at Gateway Hotel, Surigao City.



Dr. Rolando Cuaño of BMP Envi.and Community Care, Inc. during his talk to the participants of the 3-day Training on SDMP and Participatory Project Planning on August 18-20, 2017 at Cebu City.



RD Roger A. De Dios emphasizing the salient points of SDMP MOO as a reference tool involving the management and implementation of SDMP/ CDP wherein established guidelines and policies must be strictly followed by all concerned stakeholders.

Measures to Improve Small-Scale Mining per EO 79

Under this program is Assistance to P/CMRB/LGU/other stakeholders. This is composed of various sub-activities, namely;

1. Provinces Inventoried for Small Scale Mining Sites;
2. Minahang Bayan Sites Identified;
3. Minahang Bayan Sites endorsed to DENR through MGBCO;
4. P/CMRBs operationalized;
5. Meetings Conducted/Participated; and
6. P/CMRB Regional Consultations Conducted.

To date a total of five (5) Small-Scale Mining Areas were inventoried in the following Provinces, to wit: Surigao del Norte, Surigao del Sur, Agusan del Norte, Agusan del Sur and the Province of Dinagat Islands. Sitio Bulawan, Brgy. San Juan and its adjacent areas within Bayugan City, Agusan del Sur was also identified as potential Minahang Bayan area, while the application for Minahang Bayan of San Andres Minahang Bayan Association at Brgy. San Andres, Bunawan, Agusan del Sur was already endorsed to MGB Central Office for review and or approval.

All Provincial Mining Regulatory Board (PMRB) in the Provinces of Surigao del Norte, Surigao del Sur, Agusan del Norte & Agusan del Sur as well as the City Mining Regulatory Board (CMRB) of Butuan City, were operationalized. In compliance with our annual commitment in extending assistance to P/CMRB, the Office also conducted a Regional Consultation at MGB RXIII Regional Training Center, Surigao City in which participations were headed by the P/CMRBs and various small scale miners' organization in the region.

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
Provinces Inventoried for Small Scale Mining Sites	5	5	100%
Minahang Bayan Sites Identified	1	1	100%
Minahang Bayan Sites endorsed to DENR through MGBCO	1	1	100%
P/CMRBs operationalized	6	6	100%
P/CMRB Regional Consultations	1	1	100%

The activities were undertaken by the Mine Management Division of the Mines and Geosciences Bureau Regional Office XIII to improve Small-Scale Mining in the region per Executive Order No. 79.



Photo shows four (4) technical personnel of the Office conducted mapping in a horizontal underground opening in Bayugan, Agusan del Sur.

Photo shows personnel of the Office conducted mapping using Brunton compass to determine the orientation of the vein.



Outcome

For CY 2017, MMD had the following accomplishments:

- inventoried five (5) small-scale mining sites;
- identified one (1) Minahang Bayan sites;
- endorsed one (1) Minahang Bayan sites to the DENR through the MGBCO;
- operationalized five (5) PMRBs and one (1) CMRB;
- conducted twenty-five (25) meetings; and
- conducted one (1) P/CMRB Regional Consultations

Photo shows personnel of the Office conducted meeting with representatives of LGU Bayugan to discuss findings during the inventory conducted.



Monitor/audit of approved mining contracts/permits including areas within mineral reservations as to compliance to the implementation of approved Work Program and Safety, Health, Environment and Socials Programs

Monitoring activities are conducted regularly to all approved mining rights in the region. Being the regulatory body of the mining industry, we are committed to ensure that mining contractors/permit holders have complied with the terms and conditions of the approved mining permits and contracts.

The said activity includes site inspection, check the company's submission of accomplishment reports, evaluate and validate the company's accomplishment vis-à-vis the implementation of the approved work programs and check payments of taxes and other fiscal obligations to the concerned LGUs. Through this undertaking the Office could ascertain that the permit holder/contractor has implemented the approved work program and complied with the terms and conditions of the approved permit. Likewise, it is our mandate to ensure that all mining activities undertaken by the permit holder/contractor shall adapt the best mining practices to reduce possible impacts of mining to the environment.

For CY 2017 we have accomplished 100% of our annual targets.

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
Work Program	42	47	112%
Integrated SHES	42	48	114%
Integrated SHES (No. of Monitoring)	42	48	114%
Safety & Health Inspection	42	45	107%
Mine Waste & Tailings Verification	22	22	100%
ME/EE Inspection	21	30	143%
Monitoring Report on Mining Forest Program	2	2	100%
Multipartite Monitoring Teams (MMT) of mining projects with permits issued by MGB Operationalized	28	28	100%



Activity

1. *Monitoring of Mining contracts/permits based on the approved Work Program*

Overview

The activity was undertaken by Mine Management Division (MMD) of the Mines and Geosciences Bureau Regional Office XIII to monitor/audit the approved mining contracts/permits including areas within mineral reservations as to compliance to the implementation of approved Work Program and also, based on the compliance with terms and conditions of the Mineral Agreement and/or Exploration Permit.



Photo shows the reforested mined-out area at Taga-2.



Photo shows Settling Pond Phase 4 at Urbiztondo Area. The settling pond series was constructed to date the run-off from the adjacent mining company's operation.

Outcome

For CY 2017, MMD had monitored a total of forty-seven (47) mining permits/contracts which composed of nine (9) Exploration Permits, two (2) Joint Operating Agreements, thirty-four (34) Mineral Production Sharing Agreements and two (2) Mineral Processing Permits.



Photo shows the on-going reforestation activity of TMC at Taga-2 mined out area.



Summary of Approved Mining Rights Monitored

NO.	COMPANY MONITORED	PERMIT TYPE	MONTH CONDUCTED
1	Pacific Nickel Phil, Inc.	MPSA No. 072-97-XIII	January
2	Taganito HPAL	MPP No. 014-2013-XIII	January
3	Century Peak Corp.	MPSA No. 010-92-X (SMR)	March
4	Century Peak Corp.	MPSA No. 283-2009-XIII (SMR)	March
5	CTP Construction & Mining Corp.	MPSA No. 018-93-XI (SMR)	March
6	CTP Construction & Mining Corp.	MPSA No. 158-2000-XIII (SMR)	March
7	CTP Construction & Mining Corp.	MPSA No. 243-2007-XIII (SMR)	March
8	Kafugan Mining Inc.	MPSA No. 247-2007-XIII (SMR)	March
9	Marcventures Mining & Dev't. Corp.	MPSA No. 016-93-XI	March
10	Brightgreen Res. Corp.	MPSA No. 015-93-XI	March
11	Philex Gold Phils., Inc.	MPSA No. 148-99-XIII	April
12	Silangan Mindanao Mining Comp., Inc.	MPSA No. 149-99-XIII	April
13	Pacific Cement Phils., Inc.	MPSA No. 084-97-XIII	April
14	Kalayaan Copper-Gold Res. Project	EP No. 014-B XIII	April
15	Silangan Mindanao Mining Comp., Inc.	EP No. 000013-XIII	April
16	Apical Mining Corp.	EP No. 000027-XIII	April
17	SR Metals Inc.	MPSA No. 261-2008-XIII	May
18	Oriental Synergy Mining Corp.	MPSA No. 001-92-X	May
19	Comet Mining Corp.	MPSA No. 003-9-X	May
20	Oriental Vision Mining Phils., Inc.	MPSA No. 242-2007-XIII-SMR	June
21	Oriental Vision Mining Phils., Inc.	MPSA No. 240-2007-XIII-SMR	June
22	Philsaga Mining Corp.	MPSA No. 262-2008-XIII-SMR	June
23	Philsaga Mining Corp.	MPSA No. 299-2009-XIII-SMR	June
24	Philsaga Mining Corp.	MPSA No. 344-2010-XIII-SMR	June
25	Philsaga Mining Corp.	MPSA No. 343-2010-XIII-SMR	June
26	Philsaga Mining Corp.	EP No. 000017-XIII	June
27	Philsaga Mining Corp.	EP No. 000031-XIII	June
28	Philsaga Mining Corp.	EP No. 000032-XIII	June
29	Mindanao Mineral Processing Ref. Corp.	MPP No. 001-2007-XIII	June
30	Taganito Mining Corp.	MPSA NO. 266-2008-XIII-SMR	July
31	Platinum Group Metals Corp.	MPSA NO. 007-92-X	July
32	Agata Mining Ventures Inc.	MPSA NO. 134-99-XIII	July
33	Cagdianao Mining Corp.	MPSA NO. 078-97-XIII-SMR	July
34	Cagdianao Mining Corp.	MPSA NO. 241-2007-XIII-SMR	July
35	Agata Mining Ventures Inc.	EP NO. 000016-XIII	July
36	Agata Mining Ventures Inc.	EP NO. 000018-XIII	July
37	Agata Mining Ventures Inc.	EP NO. 000022-XIII	July
38	Kepha Mining Expl'n. Company	MPSA No. 284-2009-XIII	July
39	Stagno Mining Corp.	MPSA NO. 022-94X (SMR)	August
40	Philgold Metallic Ore Inc.	MPSA NO. 190-2004-XIII	August
41	Wellex Mining Corp.	MPSA No. 031-94-X (SMR)	September
42	Claver Min. Dev't. Corp.	MPSA No. 103-98-XIII (SMR)	September
43	SPHMC	MPSA No. 002-90-X (SMR)	September
44	AAM-PHIL (Parcel 1)	Joint Operating Agreement	September
45	AAM-PHIL (Parcel 2B)	Joint Operating Agreement	September
46	KROMINCO, INC.	MPSA No. 291-2009-XIII-SMR	September
47	Greenstone Resources Corp.	MPSA No. 184-2002-XIII	September

Full Enforcement of Env't'l Standards in Mining Operations pursuant to EO no. 79

Safety, Health, Environment and Socials Programs

The Integrated SHES (Safety and Health, Environment and Social Development) Monitoring conducted by the Mines and Geo-sciences Bureau (MGB) aimed to review and evaluate the company's SHES performance while increasing awareness of the employees on SHES management that can be useful in their interaction with other stakeholders.

It is also the intention of the Mines and Geo-sciences Bureau, through the designated monitoring team, to identify commendable SHES management initiatives of the company as well as come-up with a set of recommendations to enhance management areas with perceived need for enhancement.

The monitoring covers all the mandated reportorial and physical requirements that are primarily under the Safety and Health, Environment and Social Development, in pursuant under Chapter XV, Chapter XVI and Chapter XXIX of DENR Administrative Order 2010-21 which is known as the Implementing Rules and Regulation of Republic Act No. 7942, otherwise known as the "Philippine Mining Act of 1995".

P/A/P	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
Integrated SHES	42	48	114%
Integrated SHES (No. of Monitoring)	42	48	114%
Safety & Health Inspection	42	45	107%
Mine Waste & Tailings Verification	22	22	100%
ME/EE Inspection	21	30	143%
Monitoring Report on Mining Forest Program	2	2	100%
Multipartite Monitoring Teams (MMT) of mining projects with permits issued by MGB Operationalized	28	28	100%

As shown in the table above, all targets have been accomplished and some have even exceeded the target. To augment the workforce of the region and to thoroughly monitor the performances of all Caraga mining companies, technical personnel from MGB Central Office and other Regional Offices joined in the conduct of the Integrated Safety, Health, Environment and Social Development Monitoring/Audit covering the 1st Semester Accomplishments.

Summary of ISHES Monitored

NO.	COMPANY MONITORED	PERMIT TYPE	MONTH CONDUCTED
1	Pacific Nickel Phil, Inc.	MPSA No. 072-97-XIII	January
2	Taganito HPAL	MPP No. 014-2013-XIII	January
3	Century Peak Corp.	MPSA No. 010-92-X (SMR)	March
4	Century Peak Corp.	MPSA No. 283-2009-XIII (SMR)	March
5	CTP Construction & Mining Corp.	MPSA No. 018-93-XI (SMR)	March
6	CTP Construction & Mining Corp.	MPSA No. 158-2000-XIII (SMR)	March
7	CTP Construction & Mining Corp.	MPSA No. 243-2007-XIII (SMR)	March
8	Kafugan Mining Inc.	MPSA No. 247-2007-XIII (SMR)	March
9	Marcventures Mining & Dev't. Corp.	MPSA No. 016-93-XI	March
10	Brightgreen Res. Corp.	MPSA No. 015-93-XI	March
11	AAM-Phil Natural Res. Expl'n. & Dev't. Corp.	MPSA No. 328-2010-XIII	March
12	Philex Gold Phils., Inc.	MPSA No. 148-99-XIII	April
13	Silangan Mindanao Mining Comp., Inc.	MPSA No. 149-99-XIII	April
14	Pacific Cement Phils., Inc.	MPSA No. 084-97-XIII	April
15	Kalayaan Copper-Gold Res. Project	EP No. 014-B XIII	April
16	Silangan Mindanao Mining Comp., Inc.	EP No. 000013-XIII	April
17	Apical Mining Corp.	EP No. 000027-XIII	April
18	SR Metals Inc.	MPSA No. 261-2008-XIII	May
19	Oriental Synergy Mining Corp.	MPSA No. 001-92-X	May
20	Comet Mining Corp.	MPSA No. 003-9-X	May
21	Oriental Vision Mining Phils., Inc.	MPSA No. 242-2007-XIII-SMR	June
22	Oriental Vision Mining Phils., Inc.	MPSA No. 240-2007-XIII-SMR	June
23	Philsaga Mining Corp.	MPSA No. 262-2008-XIII-SMR	June
24	Philsaga Mining Corp.	MPSA No. 299-2009-XIII-SMR	June
25	Philsaga Mining Corp.	MPSA No. 344-2010-XIII-SMR	June
26	Philsaga Mining Corp.	MPSA No. 343-2010-XIII-SMR	June
27	Philsaga Mining Corp.	EP No. 000017-XIII	June
28	Philsaga Mining Corp.	EP No. 000031-XIII	June
29	Philsaga Mining Corp.	EP No. 000032-XIII	June
30	Mindanao Mineral Processing Ref. Corp.	MPP No. 001-2007-XIII	June
31	Taganito Mining Corp.	MPSA No. 266-2008-XIII-SMR	July
32	Platinum Group Metals Corp.	MPSA NO. 007-92-X	July
33	Agata Mining Ventures Inc.	MPSA NO. 134-99-XIII	July
34	Cagdianao Mining Corp.	MPSA NO. 078-97-XIII-SMR	July
35	Cagdianao Mining Corp.	MPSA NO. 241-2007-XIII-SMR	July
36	Agata Mining Ventures Inc.	EP NO. 000016-XIII	July
37	Agata Mining Ventures Inc.	EP NO. 000018-XIII	July
38	Agata Mining Ventures Inc.	EP NO. 000022-XIII	July
39	Kepha Mining Expl'n. Company	MPSA No. 284-2009-XIII	July
40	Stagno Mining Corp.	MPSA NO. 022-94X (SMR)	August
41	Philgold Metallic Ore Inc.	MPSA NO. 190-2004-XIII	August
42	Wellex Mining Corp.	MPSA No. 031-94-X (SMR)	September
43	Claver Min. Dev't. Corp.	MPSA No. 103-98-XIII (SMR)	September
44	SPHMC	MPSA No. 002-90-X (SMR)	September
45	AAM-PHIL (Parcel 1)	Joint Operating Agreement	September
46	AAM-PHIL (Parcel 2B)	Joint Operating Agreement	September
47	KROMINCO, INC.	MPSA No. 291-2009-XIII-SMR	September
48	Greenstone Resources Corp.	MPSA No. 184-2002-XIII	September

For 2017, there are eighteen (18) operating mining companies in the region and twelve (12) companies are under Care and Maintenance. The Multipartite Monitoring Team (MMT) inspections were conducted quarterly (four quarters) for the operating mining companies while semi-annual for those under care and maintenance status. About thirty (30) MMTs were operationalized. However, for the whole year, a total of ninety-nine (99) MMT inspections were conducted as spearheaded by MGB 13 and one hundred twenty-eight (128) Mine Rehabilitation Fund Committee (MRFC) meetings was facilitated, including special meetings for the deliberation and approval of the environmental programs.

Table (2) below is the list of MRFC meetings conducted in CY 2017

COMPANY		CATEGORY	DATE CONDUCTED
1ST QUARTER			
1	CTPCMC - Adlay & Dahican	SPECIAL	January 19, 2017
2	CNC	SPECIAL	January 20, 2017
3	MMDC	SPECIAL	January 20, 2017
4	TMC	SPECIAL	January 30, 2017
5	PNPI	SPECIAL	February 2, 2017
6	THPAL	SPECIAL	February 6, 2017
7	GRC	SPECIAL	February 7, 2017
8	HMC-TNP	SPECIAL	February 7, 2017
9	SRMI	SPECIAL	February 8, 2017
10	CMC	SPECIAL	February 9, 2017
11	WMC-1	SPECIAL	February 10, 2017
12	WMC-2	SPECIAL	February 10, 2017
13	CPC - Casiguran & Rapid	SPECIAL	February 13, 2017
14	OSMC	SPECIAL	February 14, 2017
15	AMRI	SPECIAL	February 15, 2017
16	KI	SPECIAL	February 15, 2017
17	AMVI	SPECIAL	February 17, 2017
18	PGMC	SPECIAL	February 17, 2017
19	LMC	SPECIAL	February 21, 2017
20	OVMPC	SPECIAL	February 21, 2017
21	CNC	REGULAR	February 23, 2017
22	GRC	REGULAR	March 6, 2017
23	PMC	SPECIAL	March 7, 2017
24	MMPRC	SPECIAL	March 7, 2017
25	SPHYMC	SPECIAL	March 7, 2017
26	THPAL	REGULAR	March 8, 2017
27	TMC	REGULAR	March 8, 2017
28	HMC-TNP	REGULAR	March 9, 2017
29	PNPI	REGULAR	March 10, 2017

	COMPANY	CATEGORY	DATE CONDUCTED
30	PGMC	REGULAR	March 14, 2017
31	AMRI	REGULAR	March 14, 2017
32	CTPCMC - Adlay & Dahican	REGULAR	March 15, 2017
33	MMC	REGULAR	March 15, 2017
34	AAMPHIL-1	SPECIAL	March 21, 2017
35	AAMPHIL-2B	SPECIAL	March 21, 2017
36	LMC	REGULAR	March 21, 2017
37	SRMI	REGULAR	March 22, 2017
38	AMVI	REGULAR	March 22, 2017
39	CMC	REGULAR	March 23, 2017
40	PMC	REGULAR	March 24, 2017
41	MMPRC	REGULAR	March 24, 2017
42	OVMPC	REGULAR	March 27, 2017
2ND QUARTER			
43	KI	REGULAR	April 4, 2017
44	CPC - Casiguran	REGULAR	April 4, 2017
45	SPHYMC	REGULAR	April 5, 2017
46	AAMPHIL-1	REGULAR	April 5, 2017
47	OSMC	REGULAR	April 5, 2017
48	CPC - Rapid	REGULAR	April 5, 2017
49	AAMPHIL-2B	REGULAR	April 17, 2017
50	PNPI	SPECIAL	April 17, 2017
51	WNC	SPECIAL	April 19, 2017
52	ANCDC	SPECIAL	April 19, 2017
53	CNC	SPECIAL	April 21, 2017
54	MMDC	REGULAR	April 21, 2017
55	SMMCI	SPECIAL	May 2, 2017
56	HMC-TNP	REGULAR	May 31, 2017
57	SRMI	REGULAR	June 1, 2017
58	PMC	REGULAR	June 2, 2017
59	MMPRC	REGULAR	June 2, 2017
60	CMC	REGULAR	June 13, 2017
61	OVMPC	REGULAR	June 13, 2017
62	LMC	REGULAR	June 14, 2017
63	WNC	REGULAR	June 14, 2017
64	ANCDC	REGULAR	June 14, 2017
65	AMRI	REGULAR	June 16, 2017
66	AAMPHIL-1	REGULAR	June 20, 2017
67	CTPCMC - Adlay & Dahican	REGULAR	June 20, 2017
68	THPAL	REGULAR	June 21, 2017
69	CNC	REGULAR	June 21, 2017
70	MMDC	REGULAR	June 21, 2017

COMPANY		CATEGORY	DATE CONDUCTED
3RD QUARTER			
71	PNPI	REGULAR	July 4, 2017
72	GRC	REGULAR	July 4, 2017
73	PGMC	REGULAR	July 5, 2017
74	AMVI	REGULAR	July 7, 2017
75	TMC	REGULAR	July 11, 2017
76	CPC - Casiguran & Rapid	REGULAR	July 18, 2017
77	CPC - Rapid	REGULAR	July 18, 2017
78	SPHYMC	REGULAR	August 22, 2017
79	OSMC	REGULAR	August 22, 2017
80	THPAL	REGULAR	August 24, 2017
81	CTPCMC - Adlay & Dahican	REGULAR	August 25, 2017
82	MMC	REGULAR	August 25, 2017
83	PNPI	REGULAR	September 22, 2017
84	HMC-TNP	REGULAR	September 25, 2017
85	AAMPHIL-1	REGULAR	September 26, 2017
86	AAMPHIL-2B	REGULAR	September 26, 2017
87	GRC	REGULAR	September 26, 2017
88	AMRI	REGULAR	September 27, 2017
89	PGMC	REGULAR	September 27, 2017
90	WMC-1	REGULAR	September 28, 2017
91	WMC-2	REGULAR	September 28, 2017
4TH QUARTER			
92	OVMPC	REGULAR	October 2, 2017
93	CMC	REGULAR	October 2, 2017
94	LMC	REGULAR	October 3, 2017
95	WNC	REGULAR	October 3, 2017
96	ANCDC	REGULAR	October 3, 2017
97	PGMC	SPECIAL	October 3, 2017
98	KI	REGULAR	October 4, 2017
99	PMC	REGULAR	October 10, 2017
100	MMPRC	REGULAR	October 10, 2017
101	TMC	REGULAR	October 10, 2017
102	SMMCI	SPECIAL	October 20, 2017
103	CPC - Casiguran & Rapid	REGULAR	October 20, 2017
104	SRMI	REGULAR	October 23, 2017
105	AMVI	REGULAR	October 23, 2017
106	CNC	REGULAR	October 25, 2017
107	MMDC	REGULAR	October 25, 2017
108	PCPI	SPECIAL	November 6, 2017
109	CTPCMC - Adlay & Dahican	REGULAR	November 28, 2017
110	HMC-TNP	REGULAR	November 29, 2017
111	AAMPHIL-1	REGULAR	December 4, 2017

	COMPANY	CATEGORY	DATE CONDUCTED
112	TMC	REGULAR	December 5, 2017
113	THPAL	REGULAR	December 5, 2017
114	PGMC	REGULAR	December 6, 2017
115	AMRI	REGULAR	December 6, 2017
116	AMVI	REGULAR	December 7, 2017
117	CNC	REGULAR	December 8, 2017
118	MMDC	REGULAR	December 8, 2017
119	LMC	REGULAR	December 11, 2017
120	WNC	REGULAR	December 11, 2017
121	CMC	REGULAR	December 12, 2017
122	OVMPC	REGULAR	December 12, 2017
123	CPC - Casiguran & Rapid	REGULAR	December 13, 2017
124	PNPI	REGULAR	December 14, 2017
125	SMMCI	REGULAR	December 15, 2017
126	PMC	REGULAR	December 19, 2017
127	MMPRC	REGULAR	December 19, 2017
128	SRMI	REGULAR	December 19, 2017

OTHER INITIATIVES

In partnership with the Caraga Mine Environmental Management Council (CMEMC) and the mining companies in the region, the Environment Section facilitated and conducted the following seminars, trainings and workshops:

1. Finalization, Deliberation and Approval of the MMT Unified Manual of Operations (MOO) last January 17-18, 2017 at the Phil. Gateway Hotel, Surigao City. The finalized document is the basis of every MMT members of Caraga mining companies in the conduct of monitoring and defines their duties and responsibilities in relation to DAO 2015-02 (Harmonization of MMT) to ensure the effective compliance of the mining industry to the different environmental laws as reflected in the ECC, EPEP and FMRDP. The activity was participated by all members of the MMT and MRFC of Caraga mining companies.
2. Capacity Enhancement Seminar for the MRFC and MMT last January 26-27, 2017 at the Phil. Gateway Hotel, Surigao City. The activity was aimed to train the MRFC and MMT members on the different aspects of monitoring work to equip them with the necessary understanding/knowledge to undertake their tasks. The training was participated again by the MMT and MRFC members of Caraga mining companies.

3. Workshop on the Standardization of AEPEP Projects, Programs and Activities (PPAs) last May 4-5, 2017 at the Phil. Gateway Hotel, Surigao City. The purpose of the activity is to have uniformity (detailed activities, indicators and costing) of the annual plans for ease of preparation, review and evaluation. The workshop was attended by the MEPEO personnel of Caraga mining companies.
4. Information, Education and Communication (IEC) Caravan and Tree Planting in celebration of the 2017 Phil. Environment Month Celebration. The region wide IEC Caravan was held in four (4) strategic locations in Caraga region, namely Loreto, Province of Dinagat Islands, Surigao City, Cantilan, Surigao del Sur and Butuan City. This was aimed to educate the public on the relevance of mining, its contribution to the local and national economy and the initiatives of the industry to protect the environment and uplift the lives of mining communities. Prior to the IEC program, a tree planting activity was conducted in the four (4) selected locations. The activity was well attended by the MEPE and COMREL officers and even the top management of companies, community stakeholders, academe and students.
5. 4th Caraga Mining Symposium and Safety Competition last October 5-6, 2017 at the Phil. Gateway Hotel and Gaisano Capital Ground in Surigao City. In coordination with the Caraga Chamber of Mines and Phil. Society of Mining Engineers (PSEM), the activity was also a venue for capacity enhancement of all mining stakeholders and to showcase the skills of men and women members of the Emergency Response Teams of competing mining companies in the fire-fighting and first aid competitions. The symposium was attended by representatives of mining companies, community stakeholders, students, academe and other government agencies.



MRFC and MMT members attended the Capacity Enhancement Seminar facilitated by MGB 13 to enrich their knowledge and skills for a more effective monitoring of mining operations.



MEPE officers of Caraga mining companies actively participated in the Standardization Workshop to come up with standard PPAs, costs and indicators for the AEPEP.



Mining companies' representatives partner with Caraga State University's students during the tree planting at the CSU grounds



Students, LGUs, community representatives joined the IEC Caravan held at Loreto Municipal Gym last June 27, 2017



Engr. Charlo R. Basadre (CTP-CMC), PSEM Caraga President, delivers his Welcome Remarks during the 4th Caraga Mining Symposium and Safety Competition.



The Safety Competition held simultaneously with the 4th Caraga Mining Symposium was participated by various mining companies and contractors all over the region.

I. ANNUAL SAFETY AND HEALTH PROGRAM (ASHP)

The ASHP represent the budgetary allocations of the Operating Mining and Exploration Companies in the CARAGA Region covering the year 2017 for the Annual Safety and Health Program as per evaluation of MGB Regional Office XIII and issuance of the ASHP Certificate of Approval. MGB RXIII had issued a total of forty-seven (47) Certificate of Approval (COA) for Annual Safety and Health Program for 2017. Other approved and existing MPSA's under exploration period are dormant and inactive and did not submit their ASHP for approval of this Office.

Safety Inspection and Monitoring of Safety and Health Program

To ensure that companies are compliant with their commitment for the safety of the employees and other stakeholders of the mining industry, MGB RXIII had conducted an annual monitoring and inspection for their Safety and Health Program. A total of forty-five (45) mining companies were inspected by the MGB personnel assigned for this activity.

Electrical/Mechanical Installation Inspection and permit issued

Permit for Electrical/Mechanical Installations as shown under Chapter XV, Section 150 of DAO 2010-21 states that, "No electrical and/or mechanical installation shall be undertaken inside a mining/quarrying operation compound without a permit issued for the purpose by the Regional Director concerned." Thus, this Office is committed to conduct regular inspection of the Electrical and Mechanical Installation in the respective mining companies in CARAGA to reduce and prevent any untoward incident that may occur. For 2017, a total of twenty-seven (27) companies were inspected and issued with the certificate of inspections.

II. PROCESSING OF PERMITS APPLICATION / ISSUANCE OF PERMITS

Chapter XV, Section 146 of the same DENR Administrative Order, mandates All Safety Engineers and Safety Inspectors of mining/quarrying operations shall be duly registered with the Regional Office and the corresponding permit shall be issued for this purpose (MGB Form Nos. 15-1, 15-2 and 15-3).

Safety Engineer/Inspectors Permit

To promote safety and health in CARAGA, Regional Director Roger A. De Dios of the Mines and Geosciences Bureau Region XIII urged mining firms to go beyond compliance when it comes to safety. Pursuant to the New Regional Scheme for Application and Renewal of Safety (Engineer/Inspector) through the initiative of the safety section, applicants for safety accreditation were required to take the written examination and oral interview in order to

enhance, improve and develop their knowledge about safety and health practices. Prior to the exam, the applicants had undergone refresher course that mainly covers lectures about the governing rules and regulations of safety to provide them adequate and appropriate safety information.

For 2017, this Office had issued Permanent/Temporary Safety Engineers/Inspectors Permits to those who passed both the written examination and oral interview that is shown on the following table:

Type of Permit	Number of permit issued
Permanent Safety Engineer	15
Temporary Safety Engineer	5
Permanent Safety Inspector	47
Temporary Safety Inspector	29

III. OTHER RELATED ACTIVITY

With the participation of the mining companies and other stakeholders of the industry, the safety section had facilitated and participated other related activities, to wit;

- Facilitated and assisted the mining companies who rendered assistance to the victims of the 6.7 earthquake in Surigao City happened last February 10, 2017. Mining companies and MGB Personnel did the following initiatives: distribution of domestic/tap water, distribution of relief goods, deployment of Emergency Response Team and others.
- Participated in the conduct of 4th Caraga Mining Symposium and Safety Competition last October 5-6, 2017 at the Philippine Gateway Hotel and Gaisano Capital Grounds in Surigao City. The personnel of the Safety Section played a major role during the Safety Competition that was participated by the Emergency Response Teams of mining companies in Caraga. The competitions aim was to test the competency of the ERTs of the mining companies. Among the 14 teams participated for both the first-aid and firefighting competition, Nickelbase Incorporated and CTP Construction and Mining Corporation were hailed as champions, respectively.
- Participated in the conduct of Study on Mine Safety and Working condition in Large-Small Scale Mining Sector in the Philippines last July 26, 2017, at Taganito Mining Corporation, Taganito, Claver, Surigao del Norte.

- Participated in the conduct of BOSH training at CTPCMC (Guest Speaker for Mine Safety and Health Std. DAO 200-98) in coordination with the In-Safety Incorporated last November 27-December 1, 2017, at Oasis Beach Resort, Carrascal, Surigao del Sur.
- Participated in the conduct of BOSH training at PHILSAGA Mining Corp (Guest Speaker for Mine Safety and Health Std. DAO 200-98) in coordination with the In-Safety Incorporated last December 11-15, 2017, at PMC mine site, Bayugan 3, Rosario, Agusan del Sur.
- Explosive Magazine Inspection/ Verification - MGB RXIII is also responsible for the inspection of the explosive magazines of the companies and endorsement to the Philippine National Police for the issuance of Permit to Purchase and Move explosive/Explosive Ingredients. This Office had issued a total of ten (10) endorsements to the PNP.

Below are some photos to support the accomplishments for CY 2017:

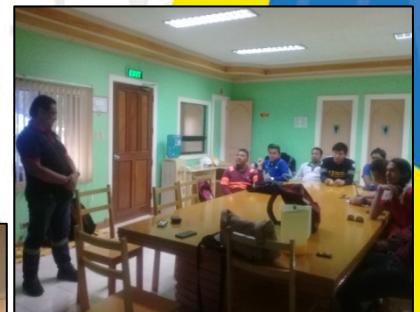


Photos during the 4th Caraga Mine Safety Competition (Left) CTP Firefighting team: (Right) TMC First-aid team

Photos during the assistance to the victims of the 6.7 magnitude earthquake



Photos during conduct of the written examination for the issuance of Safety Engineer/Inspectors Permit



Engr. Merano (left) and Engr. Banacia (right) during the conduct of BOSH trainings at TMC and PMC, respectively.

Resolution of Complaints/Cases /Conflicts

This Office is intensifying its campaign to curb the illegal small-scale mining activities within the region. The proliferation of these illegal activities has drawn numerous appeals from the local community to immediately stop these illegal operations which had caused environmental degradation within the concerned locality. This Office had already issued Cease and Desist Orders and filed cases against the illegal operators.

PERFORMANCE INDICATOR	ANNUAL TARGET	ANNUAL ACCOM	% ACCOM
MGB	12	12	100%
Panel of Arbitrators	4	4	100%
Quarterly Accomplishment/Inventory Report of the Panel of Arbitrators	4	4	100%
Complaints/Charges filed with the Provincial/City Prosecutors office	3	3	100%
Illegal mining sites with Ceased and Deceased Order (CDO) issued/ implemented	3	4	133%

We also took charge in conducting field investigations in response to the various complaints filed in the Office. For the year, there are twelve (12) complaints that were validated and resolved, to wit:

No.	Description
1	Reinvestigation report on the alleged illegal small-scale mining activity within the confines of valid and existing Exploration Permit (EP) No. 000033-XIII of Bunawan Mining Corporation (BMC) located in Brgy. Bayugan III, Rosario, ADS.
2	Reinvestigation report on the alleged illegal mining operations within the areas of Brgy. San Juan, Mt. Ararat, Mt. Carmel, New Salem, and Mt. Hanginan of Bayugan City, Agusan del Sur.
3	Reinvestigation report on the alleged Siltation of the Farmland near the Dorowan Ore Stockpile located at Sitio Layunggan, Brgy. Esperanza, Loreto, Dinagat Islands.
4	Apprehension/ seizure of 1 cargo truck loaded with 105 sacks of fine ore materials
5	Alleged Illegal Small Scale Mining activities within MPSA of MMDC
6	Complaint against quarry operations near Ojot Bridge in Brgy. Remedios, Esperanza, ADS
7	Reinvestigation on the alleged irregularities conducted quarrying sand and gravel at Baoy River within the vicinities of Claver and Gigaquit, Province of Surigao del Norte
8	Investigation regarding the Small-Scale Mining in the Bunawan, Agusan del Sur
9	Investigation Report Re: Complaint of Ms. Adelaida Quinto on the alleged illegal mining operation financed by Certain Jesselou V. Cortez at Barangay Buntasan, Malimono, Surigao del Norte
10	Letter Request for Assistance of Mr. Victoriano A. Cupay in re: Concerns with Silangan Mining Mindanao Company, Inc.
11	Reinvestigation on the alleged destruction of their cornfield by the permittee w/ issued newly renewed CSAG Permit along Wawa River at Purok 4, Brgy. Mabuhay, Bayugan City, ADS
12	Complaint of Mrs. Loreta Estaris of Purok 9, Hubasan, Brgy. Mat-I, Surigao City, relative to the alleged hauling of boulders near the river of Hubasan.

Exhibiting our momentousness in implementing our directive, for CY 2017 we have issued four (4) Cease and Desist Orders for illegal small scale mining operators, to wit;

1. Illegal small scale mining activity within the confines of valid and existing exploration permit of Bunawan Mining Corp. EP no. 000033-XIII;
2. Illegal Small Scale Mining activity anchored basically on the usage of heavy equipment within the confines of valid and existing application for MPSA denominated as APSA No. 000107-XIII at Sitio Mapaso, Brgy. Magsaysay, Placer, Surigao del Norte.;
3. Illegal Mineral Extraction within the Property of Mr. Manuel Labajo Located in Brgy. Aupagan, Butuan City; and
4. Illegal Small-Scale Mineral Processing Activities in the Municipality of Santiago, Agusan del Norte anchored basically on the Non-Existence of legal ore source of declared Minahang Bayan area, Small-Scale Mining Contracts (SSMC), Mineral Processing Zone (MPZ) and Mineral Processing Licence (MPL).

Sometime in April 16, 2017 at around 11:30 PM three (3) personalities were caught assisting in the transportation of mineral ores from Malimono, Surigao del Norte without securing a valid Ore Transport Permit (OTP). They were apprehended for assisting under the name of SECHLOE ENTERPRISES and with OR No. 994907944.

We have filed cases against the said three (3) individuals for violation of Section 103 of RA 7942, otherwise known as the Phil. Mining Act of 1992, to wit;

1. Wilfredo Bernales Lacheca;
2. Christopher Sebial; and
3. Noel Sabatin Namoc

**MINERAL
RESOURCES**

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PHISICAL ACCOMPLISHMENT

2017 MINERAL RESOURCES DATA

The nickel ore shipments in CY-2017 is 26% higher than in CY-2016. Platinum Group Metals Corp. (PGMC) located in Barangy Cagdianao, Claver, Surigao del Norte which has the highest number of completed shipments exported a total volume of 5,970,613 Wet Metric Tons (WMT) in CY-2017 compared to 4,308,639 WMT in CY-2016.

2017 Shipment Details of PGMC are as follows:

Total Volume (WMT)	5,970,613
Gross Value in US\$	\$101,182,962.86
Gross Value in Php	₱5,117,914,807.95
Excise Tax	₱102,358,296.16
Royalty Tax	₱255,895,740.40
Indigenous People (IP) Shares 1% of the Gros Php	₱51,179,148.08
No. of Shipments	109



**2017 PGMC
Shipments
Reconciliation
@ MGB13 RD's
Conference
Room and
Office.**

In the photo from the left: Annie Plaza – PGMC Liason, Rhea Sanchez – MGB13 Asst. Economist, Ana Diosell S. Bajao, SSRS MSESDD (previously Economist-II), and William S. Leonor – PGMC Accountant

Other 2017 Shipments Data are as follows:

Surigao del Norte

Mining Company/Period	VOLUME (WMT)	GROSS VALUE (US\$)	GROSS VALUE (Php)	IP Shares	NO. OF SHIPMENTS
TMC 1st-3rd Quarters - Nickel Ore Export 1.4-1.8% Ni	2,552,868	68,144,268.35	3,425,479,705.45	34,254,797.05	47
TMC 1st-3rd Quarters - Nickel Ore THPAL Ore Supply Feed 1-1.13%Ni	3,620,281	23,157,297.63	1,165,250,687.75	Per ICC MOA	9
Adnama Mining Resources, Inc. (AMRI)	849,934	7,701,804.00	389,359,593.34	3,893,595.93	16
Hinatuan Mining Corp. (HMC)	2,615,460	51,476,955.50	2,602,153,884.82	N.A.	50

Surigao del Sur

Mining Company/Period	VOLUME (WMT)	GROSS VALUE (US\$)	GROSS VALUE (Php)	IP Shares	NO. OF SHIPMENTS
Carrascal Nickel Corp. (CNC)	4,435,854	47,656,050.00	2,409,040,480.82	24,090,404.81	79
Marcventures Mining & Devt. Corp. (MMDC)	2,179,656.22	43,287,209.72	2,191,968,322.46	21,919,683.22	40
CTP Adlay & Dahican	2,003,736.258	26,670,216.73	1,250,708,335.00	Per ICC MOA	36

Dinagat Islands

Mining Company/Period	VOLUME (WMT)	GROSS VALUE (US\$)	GROSS VALUE (Php)	NO. OF SHIPMENTS
OVMPC	105,143	2,854,576.00	144,246,614.74	2
Century Peak Corp Rapid City	597,604	5,920,890.00	298,967,190.71	11
Century Peak Corp. Casiguran	55,000	495,000.00	24,627,735.00	1
Aam-Phil Parcel 1	617,827.95	5,496,145.83	277,577,587.43	
Libjo Mining Corp	428,205	7,481,105.00	377,930,301.08	9

Agusan del Norte

Mining Company/Period	VOLUME (WMT)	GROSS VALUE (US\$)	GROSS VALUE (Php)	IP Shares	NO. OF SHIPMENTS
Agata Mining Resources, Inc.	3,888,400.76	37,636,437.12	1,893,470,957.90	18,934,709.58	72

Agusan del Sur

COMMODITY	VOLUME (ounce)	GROSS VALUE (US\$)	GROSS VALUE (Php)	IP Shares	NO. OF SHIPMENTS
Philsaga Mining Corp.					22
GOLD	72,030.259	49,313,139.90	2,463,982,441.26	24,639,824.41	
SILVER	19,938.558	151,927.60	7,591,787.83	75,917.88	

FORM 1

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PHISICAL ACCOMPLISHMENT

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL ACCOMPLISHMENT							Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET			ACCOMPLISHMENT								This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)										
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
										GRAND TOTAL	48,982,540.23	48,982,540.23	100%	7,394,867.34	48,885,098.91	8,402,959.69	47,514,741.33	100%	97%
										PS	27,184,075.23	27,184,075.23	100%	5,007,316.39	27,184,067.68	5,933,840.94	27,184,067.68	100%	100%
										MOOE	21,798,465.00	21,798,465.00	100%	2,387,550.95	21,701,031.23	2,469,118.75	20,330,673.65	100%	94%
										CAP OUTLAY									
										Sub TOTAL	17,221,811.09	17,221,811.09	100%	5,309,025.93	17,124,370.32	5,581,946.83	15,992,161.62	99%	93%
A.01	GENERAL ADMINISTRATION AND SUPPORT SERVICES									PS	10,698,580.01	10,698,580.01	100%	3,544,408.49	10,698,573.01	4,017,475.78	10,698,573.01	100%	100%
										MOOE	6,523,231.08	6,523,231.08	100%	1,764,617.44	6,425,797.31	1,564,471.05	5,293,588.61	99%	82%
										CAP OUTLAY									
A.01.a	General Management and Supervision																		
A.01.a.1	Administrative Services									PS	10,698,580.01	10,698,580.01	100%	3,544,408.49	10,698,573.01	4,017,475.78	10,698,573.01	100%	100%
										MOOE	4,662,308.45	4,662,308.45	100%	1,309,807.07	4,662,308.45	1,163,428.47	3,644,076.03	100%	78%
IA.1.a	Management and Administrative Support Service	Reports submitted (no.)	12	1	12	1	12	100%	100%										
IA.1.b	Housekeeping, Building and Ground Improvement Service	Reports submitted (no.)	12	1	12	1	12	100%	100%										
IA.1.c	Human Resource Management Service	Reports submitted (no.)	12	1	12	1	12	100%	100%										
IA.1.d	Solid Waste Management Service	Solid waste management plan implemented (no.)	12	1	12	1	12	100%	100%										
IA.1.e	Implementation of Government Procurement	Reports submitted (no.)	12	1	12	1	12	100%	100%										
IA.1.f	Cashiering	Report of checks issued (no.)	12	1	12	1	12	100%	100%										
		Paid Payrolls and checks prepared (no.)	12	1	12	1	12	100%	100%										
		Advice of checks issued and cancelled (no.)	12	1	12	1	12	100%	100%										
		Report of remittance of collections and deposits to Treasury (no.)	12	1	12	1	12	100%	100%										
A.01.b	Financial Management Services									MOOE	633,000.00	633,000.00	100%	95,697.00	633,000.00	124,748.21	633,000.00	100%	100%
IA.2.a	Budget Proposals																		
IA.2.a.1	Forward Estimates	Forward Estimates submitted (no.)	4	1	4	1	4	100%	100%										
IA.2.a.2	Budget Proposal and Report Forms	Proposed budget reports submitted (no.) (DBM)	1	0	1	0	1	#DIV/0!	100%										
IA.2.a.3	Proposals to Senate/Congress	Proposed budget submitted based on NEP (no.)																	
IA.2.b	Budget Execution Program																		
IA.2.b.1	Disbursement Program	Disbursement program and ABM for CO and Regional Offices reports (no.)	12	1	12	1	12	100%	100%										
IA.2.b.2	Financial Plan	Financial Plan for CO and Regional Offices reports (no.)	1					#DIV/0!	0%										
IA.2.b.2	Monthly Estimate of Income	Monthly Estimate of Income submitted (no.)	12	1	12	1	12	100%	100%										
IA.2.c.1	Budget Reports																		
		Monthly budget reports (no.)	60	5	60	5	60	100%	100%										
		Quarterly budget reports (no.)	12	3	12	3	12	100%	100%										
		Annual budget reports (no.)																	
IA.2.c.2	Accounting Reports																		
		Financial Accountability Reports: Financial Accountability Reports:																	
		Weekly Financial Performance Report (no.)						#DIV/0!	#DIV/0!										
		Monthly Financial Accountability Reports (no.)	36	3	36	3	36	100%	100%										
		Quarterly Financial Accountability Reports (no.)	12	3	12	3	12	100%	100%										
		Annual Financial Accountability Reports (no.)	1																
		Monthly financial reports (no.)	108	9	108	9	108	100%	100%										
		Updated Subsidiary Ledgers (no.)																	
		Quarterly Schedules (no.)	24		24		24	#DIV/0!	100%										
		Quarterly Financial Statements (no.)	12		12		12	#DIV/0!	100%										

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL ACCOMPLISHMENT								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET												This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
I.A.2.c.3) Cashiering		Annual Schedules/Reports (no.)	14		14		14	#DIV/0!	100%											
		Annual Financial Statements (no.)	8		8		8	#DIV/0!	100%											
		Report of checks issued (no.)	12	1	12	1	12	100%	100%											
		Paid payrolls and checks prepared (no.)	12	1	12	1	12	100%	100%											
		Advice of checks issued and cancelled (no.)	12	1	12	1	12	100%	100%											
		Report of remittance of collections and deposits to Treasury (no.)	12	1	12	1	12	100%	100%											
		Report of revenue collection (no.)	12	1	12	1	12	100%	100%											
A.01.c	Planning and Policy Formulation									MOOE	1,227,922.63	1,227,922.63	100%	359,113.37	1,130,488.86	276,294.37	1,016,512.58	92%	90%	
I.A.3.a	Preparation/Endorsement of Plans and Programs	Work and financial plan finalized (no.)	1	0	0	0	0													
		Proposed budget submitted (no.)	1	0	0	0	0													
I.A.3.b	Program Monitoring and Evaluation	Consolidated monthly physical accomplishment reports submitted (no.)	12	1	12	1	12	100%	100%											
		Validation reports submitted (no.)	4	1	3	1	3													
		Semi-Annual/Annual report prepared (no.)	2		2		2	#DIV/0!	100%											
IB	Human Resource Development																			
I.B.1	Human Resource Development Service																			
I.B.1.a	Management of Training and Career Development	Reports prepared (no.)						#DIV/0!	#DIV/0!											
I.B.1.b	Youth Programs and Projects	Youth related activities coordinated/ participated/ attended (no.)						#DIV/0!	#DIV/0!											
A.03	OPERATIONS																			
MFO 1: MINERAL RESOURCE DEVELOPMENT SERVICES										Sub TOTAL										
										PS										
										MOOE										
										CAP OUTLAY										
	Quantity:	number of new mineral reservation areas assessed/endorsed for declaration	n/a																	
	Quality:	percentage of area surveyed that is identified as mineral reservation	n/a																	
	Quality:	percentage of stakeholders who rate the quality of MGB mineral reservation maps as good or better	n/a																	
	Quality:	percentage increase in Peso value for royalty payments collected	n/a																	
A.03.a	Mineral Resource Services									Sub TOTAL	900,000.00	900,000.00	100%	-	900,000.00	536.80	890,809.12	100%	99%	
										PS										
A.03.a.1	Communication Plan for Minerals Development									MOOE	900,000.00	900,000.00	100%	-	900,000.00	536.80	890,809.12	100%	99%	
A.03.a.1.a	Conduct Awareness	Stakeholder's forum (no.)																		
	4	1) Dialogues with Sangguniang Panlalawigan/Bayan/Panlungsod/ Barangay	5	0	5	0	5	#DIV/0!	100%	MOOE	214,515.00	214,515.00	100%		214,515.00		214,515.00	100%	100%	
		2) Dialogues with other groups (Religious groups, CSO, academe,etc.)	12	1	12	0	13	0%	108%	MOOE	122,000.00	122,000.00	100%		122,000.00	536.80	122,000.00	100%	100%	
		Radio/TV guestings (no.)	12	1	12	0	32	0%	267%											
		Press releases/photo releases/feature stories (no.)	12	1	12	0	12	0%	100%	MOOE	125,485.00	125,485.00	100%		125,485.00		125,485.00	100%	100%	
A.03.a.1.b	Capacity Building on MRGS laws, rules and regulations	Workshops/training conducted/coordinated participated on: (no.)																		
	1)	For MGB personnel to attend (no.)	6	0	6	0	29	#DIV/0!	483%	MOOE	188,000.00	188,000.00	100%		188,000.00		188,000.00	100%	100%	
	2)	b) For LGUs and other stakeholders (no.)	3	0	3	0	3	#DIV/0!	100%	MOOE	125,000.00	125,000.00	100%		125,000.00		125,000.00	100%	100%	
	3)	For Small Scale Miners (no.)	2	0	2	0	2	#DIV/0!	100%											
A.03.a.1.c	Generate/Publish/ Disseminate Information & IEC Materials																			
		Website established/ maintained (no.)	12	1	12	0	11	0%	92%											
		Articles Issued (no.)	24	2	24	4	24	200%	100%											

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL ACCOMPLISHMENT								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET												This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
A.03.a.1.d	National Linkages	IEC materials produced no.)	4	0	4	0	5	#DIV/0!	125%											
		IEC materials reproduced/distributed (no.)	100	0	100	0	609	#DIV/0!	609%											
		Statistics reports submitted to MGBCO (no.)	32	0	32	0	32	#DIV/0!	100%											
		Maps/Map Info Database submitted to MGBCO (no.)	24	2	24	2	24	100%	100%											
		MGRS reports submitted to MGBCO (no.)	35	3	35	3	35	100%	100%											
		Linkages coordinated (no.)	12	1	12	0	31	0%	258%	MOOE	125,000.00	125,000.00	100%		125,000.00		115,809.12	100%	93%	
Establishment of Mineral Reservations per EO No. 79																				
A.03.a.2 National Mineral Reservation Program										Sub TOTAL	284,000.00	284,000.00	100%	-	284,000.00	-	284,000.00	100%	100%	
A.03.a.2.a Management of Existing Mineral (CENTRAL OFFICE)										PS										
										MOOE	284,000.00	284,000.00	100%	-	284,000.00	-	284,000.00	100%	100%	
										CAP OUTLAY										
A.03.a.2.b Establishment of New Mineral										MOOE	284,000.00	284,000.00	100%		284,000.00		284,000.00	100%	100%	
Area assessed/endorsed for declaration (no.)																				
A.03.b GEOSCIENCES DEVELOPMENT SERVICES										Sub TOTAL	17,607,251.90	17,607,251.90	100%	1,150,920.64	17,607,251.90	1,541,700.17	17,386,129.85	100%	99%	
										PS	6,110,017.98	6,110,017.98	100%	536,308.00	6,110,017.98	656,230.14	6,110,017.98	100%	100%	
A.03.b.1 Geohazard Survey and Assessment										MOOE	11,497,233.92	11,497,233.92	100%	614,612.64	11,497,233.92	885,470.03	11,276,111.87	100%	98%	
										CAP OUTLAY										
A.03.b.1.a. Identification and Mapping of Critical Land Areas																				
A.03.b.1.a.1 Vulnerability and Risk Assessment (VRA)										PS	6,110,017.98	6,110,017.98	100%	536,308.00	6,110,017.98	656,230.14	6,110,017.98	100%	100%	
a) Municipality/Cities assessed (no.)										MOOE	6,019,486.77	6,019,486.77	100%	169,493.48	6,019,486.77	345,195.16	5,972,326.40	100%	99%	
b) Geohazard Report prepared (no.)																				
A.03.b.1.a.2 Updating of 1:10,000 Scale geohazard maps as a result of changes due to natural										MOOE	199,395.00	199,395.00	100%	3,141.12	199,395.00	30,493.76	199,395.00	100%	100%	
a) Municipality/Cities assessed (no.)																				
b) Geohazard Report prepared (no.)																				
A.03.b.1.a.3 Detailed Sub-surface Assessment																				
a) Municipality/Cities assessed (no.)																				
b) Geohazard Report prepared (no.)																				
Production of Geohazard/VRA Maps																				
Geohazard/VRA Maps Prepared (no.)																				

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET			ACCOMPLISHMENT									This Month	To Date	This Month	To Date	Obligation/ Allotment/ (18/12*100)	Disbursement/ Obligation/ (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
A.03.b.1.a.4	Geohazard IEC Materials Dissemination																			
		Maps printed/ disseminated (no.)	0	0	0	0	10	#DIV/0!	#DIV/0!											
		Posters disseminated (no.)	1000	0	1000	217	1167	#DIV/0!	117%											
		VCDs disseminated (no.)	50	0	60	17	58	#DIV/0!	116%											
		Pamphlets/Flyers disseminated (no.)	500	0	500	98	744	#DIV/0!	149%											
		Signages/Billboards installed (no.)	2	1	2	1	2	100%	100%											
		Quarangle Geohazard Maps uploaded in the website (no.)	0	0	0	0	0	#DIV/0!	#DIV/0!											
		Tri-Media (no.)	4	0	4	0	5	#DIV/0!	125%											
	A.03.b.1.a.5	Capacity Building	Training/workshops/seminars conducted/attended/ organized coordinated (no.)																	
		Training/seminars for MGB technical personnel (no.)	8	0	8	2	17	#DIV/0!	213%											
A.03.b.1.a.6	Conduct of IEC to LGUs	a) Seminars/Workshops conducted for LGU's (Barangay) (no.)	0	0	0	0	0	#DIV/0!	#DIV/0!											
		b) Lectures presented (no.)	5	0	5	0	5	#DIV/0!	100%											
		c) Advisories issued (no.)	5	0	5	5	5	#DIV/0!	100%											
		d) Activity/exit reports issued (no.)	0	0	0	0	0	#DIV/0!	#DIV/0!											
	A.03.b.1.a.7	Geohazards Operations Center	Geohazards Operation Center Maintained (no.)	12	1	12	1	12	100%	100%										
		Advisories re-issued (no.)	36	0	36	72	72	#DIV/0!	200%											
		Incident/flash reports prepared (no.)	0	0	0	1	2	#DIV/0!	#DIV/0!											
		PDRA meetings attended (no.)	0	0	0	0	0	#DIV/0!	#DIV/0!											
A.03.b.1.b.	Coastal Geohazard and Impact of Climate Change	LGUs assessed																		
	A.03.b.1.b.1	Field Mapping and Survey (1:10,000 Scale)	a) Municipality (no.)	14	0	14	0	14	#DIV/0!	100%	MOOE	1,839,272.82	1,839,272.82	100%	63,315.61	1,839,272.82	77,843.15	1,825,591.38	100%	99%
b) Reports prepared (no.)		14	2	14	6	14	300%	100%												
Production of Coastal Geohazard		Coastal Geohazard/VRA Maps prepared (no.)	14	0	14	14	14	#DIV/0!	100%											
Advisories issued (no.)		14	0	14	2	14	#DIV/0!	100%												
Activity/exit report (no.)							#DIV/0!	#DIV/0!												
A.03.b.2 Geological Mapping																				

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET			ACCOMPLISHMENT									This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
A.03.c.1.a.2 Use It or Lose It Policy Review of the performance of existing mining operations per EO no. 79	A.03.c.1.a.3 Approval of SHES Programs	OTP	320	2	320	7	665	350%	208%											
		Certifications	100	0	100	14	278	#DIV/0!	278%											
		c. Others (Accreditations, CEMCRR/CoE, DMPF for RO-issued MPP)	6	1	6	0	6	0%	100%											
		Accreditations	4	0	4	0	1	#DIV/0!	25%											
		CEMCRR	2	1	2	0	4	0%	200%											
		CoE	0	0	0	0	0	#DIV/0!	#DIV/0!											
		DMPF	0	0	0	0	1	#DIV/0!	#DIV/0!											
		d. Mineral Ore Export Permit (MOEP) Issued/validated	260	0	260	1	615	#DIV/0!	237%	MOOE	86,000.00	86,000.00	100%		86,000.00	500.00	86,000.00	100%	100%	
		MOEP Issued (no.)	260	0	260	1	615	#DIV/0!	237%											
		MOEP Validated (no>)	0	0	0	0	0													
		(a) Mining applications with final action (no.)	7	0	7	0	7	#DIV/0!	100%	MOOE	63,000.00	63,000.00	100%		63,000.00	2,000.00	63,000.00	100%	100%	
		(b) Mining Permits/ Contracts reviewed/ endorsed for Cancellation (no.)	62	0	62	0	62	#DIV/0!	100%											
		EPEP/FMRDP/PEIR endorsed to MRFC (no.)	1	0	1	0	4	#DIV/0!	400%											
		Annual EPEP approved (no.)	22	0	22	0	24	#DIV/0!	109%											
Measures to improve Small-Scale Mining per EO 79	A.03.c.1.b Assistance to P/CMRB LGUs/other Stakeholders	SDMP/CDP approved (no.)	2	0	2	1	6	#DIV/0!	300%											
		Annual SDMP approved (no.)	22	0	22	0	27	#DIV/0!	123%	MOOE	63,000.00	63,000.00	100%		63,000.00		63,000.00	100%	100%	
		Annual Safety and Health Programs approved (no.)	57	0	57	3	47	#DIV/0!	82%	MOOE	63,000.00	63,000.00	100%		63,000.00		63,000.00	100%	100%	
		Environmental Work Program endorsed to MMD (no.)	5	0	5	0	5	#DIV/0!	100%											
		NGP Monitoring Reports Submitted (no.)	5	0	5	0	8	#DIV/0!	160%											
		Provinces Inventoried for Small Scale Mining Sites (no.)	5	0	5	0	5	#DIV/0!	100%	MOOE	32,000.00	32,000.00	100%		32,000.00		32,000.00	100%	100%	
		Minahang Bayan Sites Identified (no.)	1	0	1	0	1	#DIV/0!	100%	MOOE	90,000.00	90,000.00	100%		90,000.00	1,000.00	90,000.00	100%	100%	

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET			ACCOMPLISHMENT									This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
		P/CMRBs operationalized (no.)	6	0	6	0	6	#DIV/0!	100%											
		P/CMRBs Reconstituted (no.)																		
		Meetings Conducted/Participated (no.)	24	0	24	0	25	#DIV/0!	104%	MOOE	63,000.00	63,000.00	100%	2,000.00	63,000.00	2,000.00	63,000.00	100%	100%	
		P/CMRB Regional Consultations Conducted (no.)	1	0	1	0	1	#DIV/0!	100%											
PI 2 Monitoring																				
	Quantity:	number of sites and facilities monitored and/or inspected with reports issued																		
	Quality:	percentage of agreements with one or more violations over the last 3 years																		
	Timeliness:	percentage of sites that have been inspected more than twice in the last 2 years																		
A.03.c.2 Mining Industry Development Program																				
A.03.c.2.a Mining Industry																				
		Monitor/audit of approved mining contracts/permits including areas within mineral reservations as to compliance to the implementation of approved Work Program and Safety, Health, Environment and																		
		Socials Programs Permit areas/projects monitored																		
Full Enforcement of Env'tl Standar in Mining Operations pursuant to	(1)	Work Program	42	0	42	0	47	#DIV/0!	112%	PS MOOE	10,375,477.24	10,375,477.24	100%	926,599.90	10,375,476.69	1,260,135.02	10,375,476.69	100%	100%	
	(2.a)	Safety, Health, Environment and Socials Programs (No. of Permits/Contracts)	42	0	42	0	48	#DIV/0!	114%	MOOE	504,000.00	504,000.00	100%		504,000.00		496,164.05	100%	98%	

Code	Program/Project/Activity (PPA)	Performance Indicators	PHYSICAL ACCOMPLISHMENT								Expense Class	Allotment	Released	% (Amt. Released/ Allotment* 100)	Obligation		Disbursement		% Budget Utilization Rate (BUR)	
			TARGET												This Month	To Date	This Month	To Date	Obligation/ Allotment (18/12*100)	Disbursement/ Obligation (18/16*100)
			Annual	This Month	To Date	This Month	To Date	% Accom (This Month) (8/6*100)	% Accom (To Date) (9/5*100)											
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
A.03.c.2.b	Strengthen Multi-Partite Monitoring System	(2.b) Safety, Health, Environment and Socials Programs (No. of Monitoring)	42	0	42	0	48	#DIV/0!	114%	MOOE	1,018,000.00	1,018,000.00	100%		1,018,000.00		1,018,000.00	100%	100%	
		(2.c) Safety & Health Inspection (no.)	42	0	42	0	45	#DIV/0!	107%											
		(2.d) Mine Wastes & Tailings Verification (no.)	22	0	22	0	22	#DIV/0!	100%											
		(2.e) ME/EE Inspection (no.)	21	0	21	2	30	#DIV/0!	143%											
		(3) Monitoring Report on Mining Forest Program (no.)	2	0	2	0	2	#DIV/0!	100%											
		Multipartite Monitoring Teams (MMT) of mining projects with permits issued by MGB Operationalized (no.)	28	0	28	0	53	#DIV/0!	189%											
A.03.c.3 Mine Rehabilitation Program a. Bagacay Mine area																				
		Rehabilitation/Mitigating Measures plan prepared/ implemented(no.)																		
b. Risk Assessment of other Abandoned/inactive mining areas/sites Conducted (no.)																				
		Rehabilitation/Mitigating Measures plan prepared/implemented (no.)																		
c. Marcopper																				
		Monitoring Report Submitted (no.) Region IV-B																		
PI 3 Enforcement																				
A.03.c.4	Resolution of Complaints/Cases / Conflicts	Qu number of violations or complaints acted upon with reports issued																		
		Qu percentage of submitted reports that resulted in the issuance of notice of violations and penalties imposed																		
		percentage of complaints or detected violations that are acted upon earlier than the prescribed period																		
		Number of Complaints/Cases/conflicts investigated/resolved (no.)																		
		(1.) MGB	12	1	12	0	12	0%	100%	MOOE	121,000.00	121,000.00	100%	4,180.00	121,000.00	6,000.00	121,000.00	100%	100%	
		(2.a) Panel of Arbitrators	4	0	4	0	4	#DIV/0!	100%	MOOE	115,000.00	115,000.00	100%	2,140.87	115,000.00	2,140.87	115,000.00	100%	100%	
A.03.c.5	Anti-Illegal Mining	(2.b) Quarterly Accomplishment/Inventory Report of the Panel of Arbitrators (no.)	4	0	4	0	4	#DIV/0!	100%											
		(3.) Complaints/Charges filed with the Provincial/ City Prosecutors office (no.)	3	0	3	0	3	#DIV/0!	100%											
		Illegal mining sites with Ceased and Deceased Order (CDO) issued/ implemented (no.)	3	0	3	0	4	#DIV/0!	133%											

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