



Republic of the Philippines
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MEMORANDUM

FOR : **The Undersecretaries**
Organizational Transformation and Human Resources
Field Operations - Luzon, Visayas and Environment
Finance, Information Systems and Climate Change

The Assistant Secretary
Dr. Noralene M. Uy

The Directors
Legal Affairs Service
Policy and Planning Service
Climate Change Service
Document Management and Operations Support

The Bureau Directors
Land Management Bureau
Environmental Management Bureau
Biodiversity Management Bureau

The Officer-in-Charge
Mines and Geosciences Bureau

FROM : **The Director**
Legislative Liaison Office

SUBJECT : **ENDORSEMENT FOR REVIEW RE: DRAFT POSITION
PAPER ON SENATE BILLS ESTABLISHING EVACUATION
CENTERS**

DATE : 23 February 2023

In reference to the Memorandum from the Undersecretary and Chief of Staff dated 21 February 2023 requesting our office to coordinate with other offices/services for the consolidation and finalization of the position paper on Senate Bills Establishing Evacuation Centers, may we respectfully endorse the draft position paper for your review and comments prior our submission to the Office of the Secretary.

Attached is the draft position paper containing comments from the Directors of Policy and Planning Service and Document Management and Operations Support, the Bureau Director of the Environmental Management Bureau and the Officer-in-Charge of the Mines and Geosciences Bureau. Further, copies of the Senate Bills may be accessed through this link: <https://tinyurl.com/37b3mmj9>, for your reference.

Due to the urgency of the matter, may we **request that your inputs be received by our office no later than 3PM today, February 23, 2023**, via email at denrlo@denr.gov.ph. Our Office will consider that you have no objections to the draft position paper if no comments were provided to us on the deadline set.

For consideration.


ROMIROSE B. PADIN

Cc: Undersecretary for Special Concerns and Legislative Affairs



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23 February 2023

HON. JINGGOY EJERCITO ESTRADA

Chairperson

Committee on National Defense and Security, Peace, Unification and Reconciliation

Senate of the Philippines

GSIS Bldg., Financial Center,

Diokno Blvd., Pasay City

THRU: MS. CHARLYNE CLAIRE FUENTES-OLAY

Legislative Committee Secretary

The DENR recognizes that evacuation centers are critical in increasing the Philippine's adaptive capacity to disasters, whether natural or human-induced ones. We also note that many Local Government Units still do not have safe, dedicated, and permanent evacuation centers, which can serve, not only as a refuge for affected families during the onslaught of disasters but also as temporary shelters while rebuilding their calamity-stricken homes. Thus, permanent evacuation centers which can withstand disasters are also critical to resiliency and jumpstarting the recovery of these communities.

Our past experience with numerous calamities are lessons learned to invest in identifying areas that are guaranteed to ensure the safety of communities during these events. The Department, therefore, supports the proposed bills to establish these centers in all cities, provinces, and municipalities. To implement this, the DENR is of the view that there is a need for a **sustained and programmatic construction of safer, permanent centers** in the country which prioritizes highly vulnerable LGUs. This initiative needs to feature **Climate and Disaster Risk-Based Prioritization Criteria** to be facilitated by NDRRMC in consultation with the LGUs.

The criteria stipulated in the bills are good starting points and if we may be allowed to add, the availability of utilities such as access to safe and potable drinking water as well as evacuation routes for all hazards need better articulation. In addition, evacuation area for livestock and domestic animals, especially for rural communities, is a good practice already being applied in Bangladesh and other countries. Lessons learned from these countries can also be considered.

We recommend that the site viability criteria through the DENR's Mines and Geosciences Bureau (MGB) should be made mandatory in site selection. Along these lines, may we be allowed to submit our specific recommendations in our paper.

Further, other agencies should also be involved in selecting sites for evacuation centers. With this, we put forward the following positions, specifically on **Sec. 4. Evacuation Center**

Requirements of SBN 193 by Sen. Go; Sec. 4. Facility Requirements of SBN 940 by Sen. Gatchalian and SBN 1200 by Sen. Lapid; and Sec. 3. Requirements of SBN 1562 by Sen. Tulfo, as follows:

1. Situate evacuation centers in areas with low susceptibility to rain-induced landslides based on DENR-MGB assessment

Pursuant to the Joint Memorandum Circular DENR-DILG-DND-DPWH-DOST 2014-01, evacuation centers shall be located in areas having **LOW SUSCEPTIBILITY** to hydro-meteorological hazards, as identified in hazards maps of DENR-MGB (for flood and rain-induced landslide) and DOST-PAGASA (for storm surge).

- a. Generally, areas with **Low Susceptibility** to RIL may be used as sites for dwelling/permanent habitation and evacuation centers can be established on these zones.
 - b. For areas with **Moderate Susceptibility** to RIL, dwelling/permanent habitation and development may be allowed provided that appropriate engineering intervention measures are made with continuous monitoring. Evacuation Centers should not be established on these zones.
 - c. Those areas identified as **High to Very High** to RIL (critical zones), dwelling/permanent habitation should also not be allowed. Critical facilities may be allowed provided that appropriate engineering intervention measures are implemented with continuous monitoring. Evacuation Centers should not be established on these zones.
2. Implement appropriate engineering interventions for evacuation centers as mitigating measures for flood, landslide and other hazards

It is recommended that appropriate flood and/or rain-induced landslide mitigating measures be implemented as deemed necessary by project engineers and the local building officials concerned prior to the final design and construction of the evacuation center.

Example of engineering intervention is increasing the floor level. The **MAXIMUM** flood height shall be considered in the design as opposed to the "average flood level." This may be based on:

- a. DENR-MGB data and other scientific data;
 - b. Historical experience; and
 - c. LGU-formulated contingency Plans indicating the worst-case scenario
3. Leadership and initiation in site identification should be made by the LGUs with the support of DENR and other agencies

The selection of sites for evacuation centers shall be done by the Local Government Units with technical assistance from DENR-MGB and other science agencies. Site

identification shall be based on all available information such as existing land use and geohazard susceptibility maps. The pre-selected sites will then be assessed by technical personnel of the DENR-MGB for their suitability based on standard parameters set as indicated in existing laws and regulations for land and infrastructure development.

This is pursuant to Republic Act 10121 or the Philippine DRRM Act of 2010 which provides:

Section 12. Local Disaster Risk Reduction and Management Office (LDRRMO). (a) There shall be established an LDRRMO in every province, city and municipality, and a Barangay Disaster Risk Reduction and Management Committee (BDRRMC) in every barangay
... xxx ...

(c) The provincial, city and municipal DRRMOs or BDRRMCs shall perform the following functions with impartiality given the emerging challenges brought by disasters of our times:

...xxx...

(2) Facilitate and support risk assessments and contingency planning activities at the local level;

(3) Consolidate local disaster risk information which includes natural hazards, vulnerabilities, and climate change risks, and maintain a local risk map

... xxx ...

(9) Identify, assess and manage the hazards vulnerabilities and risks that may occur in their locality.

4. Involve not just the DENR-MGB but also other government/technical agencies for site-specific technical assessment and site identification for evacuation centers

It is not enough to solely look into the data regarding rain-induced landslide susceptibility provided by DENR-MGB. Other factors should be considered such as the presence of human-induced hazards in the area, proximity in earthquake generators, and land suitability of the area.

In the case of lands, to address potential foundation problems, such as long-term settlement, **geotechnical and site-specific studies** should be conducted. Further, other types of geohazards, such as earthquake-related ground shaking and liquefaction, should also be considered to determine comprehensively the suitability of the site. The assessment for earthquake-related hazards may be referred to DOST-PHIVOLCS.

For the assessment of the presence of insurgencies (as human-induced hazards), this can be referred to the AFP for technical assessment.

Aside from the foregoing, the Department interposes no objection and supports the establishment of standard-based evacuation centers in every city and municipality ensuring equal protection among all citizens. Further, DENR believes that the establishment and maintenance of a fully-equipped and operational evacuation center, in order to protect the lives and properties of the Filipinos and strengthen the country's preparedness and response to environmental and climatic events will greatly promote the quality of life among the Filipino people.

For consideration.

Very truly yours,

MARIA ANTONIA YULO LOYZAGA
Secretary



MEMORANDUM

FOR : **The Undersecretary**
Special Concerns and Legislative Affairs

THRU : **The Director**
Legislative Liaison Office

FROM : **The Undersecretary and Chief of Staff**

SUBJECT : **DENR'S POSITION ON BILLS RE ESTABLISHMENT OF
EVACUATION CENTERS**

DATE : FEB 21 2023

With reference to the agreements during the Senate Joint Public Hearing on February 21, 2023, the undersigned respectfully transmits the draft DENR's position on bills regarding the establishment of evacuation centers. Said draft has been jointly prepared by the Directors of Policy and Planning Service, and Document Management and Operations Support (based on inputs from the Mines and Geosciences Bureau), and duly checked and delivered by the Undersecretary for Organizational Transformation and Human Resources as the Resource Person.

May we kindly request your office to package, finalize and submit the official position paper of the DENR to be signed by the Secretary **not later than February 23, 2022** for submission to the Senate Committees. Please coordinate with other offices/services for the consolidation and finalization of the position.

For your consideration and appropriate action.


MARILOU G. ERNI

CC: **The Undersecretary**
Organizational Transformation and Human Resources

The Director
Policy and Planning Service

DENR'S POSITION ON BILLS RE ESTABLISHMENT OF EVACUATION CENTERS

The DENR recognizes that evacuation centers are critical in increasing the Philippine's adaptive capacity to disasters, whether from natural or human-induced ones. We also note that many Local Government Units still do not have safe, dedicated, and permanent evacuation centers, which can serve, not only as refuge for affected families during the onslaught of disasters but also as temporary shelters while rebuilding their calamity stricken homes. Thus, permanent evacuation centers which can withstand disasters are also critical to resiliency and to jumpstarting the recovery of these communities.

Our past experience with numerous calamities are lessons learned to invest in identifying areas that are guaranteed to ensure the safety of communities during these events. The Department therefore supports the proposed bills to establish these centers in all cities, provinces, and municipalities. To implement this, the DENR is of the view that there is a need for a **sustained and programmatic construction of safer, permanent centers** in the country which **prioritizes highly vulnerable LGUs**. This initiative needs to feature a **Climate and Disaster Risk-Based Prioritization Criteria** to be facilitated by NDRRMC in consultation with the LGUs.

The criteria stipulated in the bills are good starting points and if we maybe allowed to add, the availability of utilities such as access to safe and potable drinking water as well as evacuation routes for all hazards need better articulation. In addition, evacuation area for livestock and domestic animals, especially for rural communities, is a good practice already being applied in Bangladesh and other countries. Lessons learned from these countries can also be considered.

Lastly, we recommend that the site viability criteria through the DENR's Mines and Geosciences Bureau should be made mandatory in site selection. Along these lines, may we be allowed to submit our specific recommendations in our paper.

Further, other agencies should also be involved in selecting sites for ECs. With this, we put forward the following positions:

1. Situate evacuation centers in areas with low susceptibility to rain-induced landslides based on DENR-MGB assessment
2. Implement appropriate engineering interventions for evacuation centers as mitigating measures for flood, landslide and other hazards
3. Leadership and initiation in site identification should be made by the LGUs with the support of DENR and other agencies
4. Involve not just the DENR-MGB but also other government/technical agencies for site-specific technical assessment and site identification for evacuation centers

SPECIFIC COMMENTS/ ARGUMENTS IN THE FOLLOWING SECTIONS:

Section 4. Evacuation Center Requirements of SBN 193 (Sen. Go);
Section 4. Facility Requirements of SBN 940, 1200 (Sen. Gatchalian);
Section 4. Facility Requirements of SBN 1200 (Sen. Lapid);
Section 3. Requirements of SBN 1652 (Sen. Tulfo);

1. SITUATE EVACUATION CENTERS IN AREAS WITH LOW SUSCEPTIBILITY TO RAIN-INDUCED LANDSLIDES (RIL) BASED ON DENR-MGB ASSESSMENT

Pursuant to the Joint Memorandum Circular DENR-DILG-DND-DPWH-DOST 2014-01, evacuation centers shall be located in areas having **LOW SUSCEPTIBILITY** to hydro-meteorological hazards, as identified in hazards maps of DENR-MGB (for flood and rain-induced landslide) and DOST-PAGASA (for storm surge).

- Generally, areas with **Low Susceptibility** to RIL may be used as sites for dwelling/ permanent habitation and evacuation centers can be established on these zones.
- For areas with **Moderate Susceptibility** to RIL, dwelling/permanent habitation and development may be allowed provided that appropriate engineering intervention measures are made with continuous monitoring. Evacuation Centers should not be established on these zones.
- Those areas identified as **High to Very High** to RIL (critical zones), dwelling/permanent habitation should also not be allowed. Critical facilities may be allowed provided that appropriate engineering intervention measures are implemented with continuous monitoring. Evacuation Centers should not be established on these zones.

2. IMPLEMENT APPROPRIATE ENGINEERING INTERVENTIONS FOR EVACUATION CENTERS AS MITIGATING MEASURES FOR FLOOD, LANDSLIDE AND OTHER HAZARDS

It is recommended that appropriate flood and/or rain-induced landslide mitigating measures be implemented as deemed necessary by project engineers and the local building officials concerned prior to the final design and construction of the evacuation center.

Example of engineering intervention is increasing the floor level. The **MAXIMUM** flood height shall be considered in the design as opposed to the "average flood level." This may be based on:

- DENR-MGB data and other scientific data
- Historical experience
- LGU-formulated contingency Plans indicating the worst-case scenario

3. LEADERSHIP AND INITIATION IN SITE IDENTIFICATION SHOULD BE MADE BY THE LGUS WITH THE SUPPORT OF DENR AND OTHER AGENCIES

The selection of sites for evacuation centers shall be done by the Local Government Units with technical assistance from DENR-MGB and other science agencies. Site identification shall be based on all available information such as existing land use and geohazard susceptibility maps. The pre-selected sites will then be assessed by technical personnel of the DENR-MGB for their suitability based on standard parameters set as indicated in existing laws and regulations for land and infrastructure development.

Reference and Justifications for LGU's leadership and Initiation

Republic Act 10121, Philippine DRRM Act of 2010

Section 12. There shall be Local Disaster Risk Reduction and Management Office (LDRRMO) in every province, city and municipality, and a Barangay Disaster Risk Reduction and Management Committee (BDRRMC) in every barangay

- Item 2, LDRRMOs shall facilitate and support risk assessments and contingency planning activities at the local level;
- Item 3, LDRRMOs shall consolidate local disaster risk information which includes natural hazards, vulnerabilities, and climate change risks, and maintain a local risk map
- Item 9, LDRRMOs shall identify, assess and manage the hazards vulnerabilities and risks that may occur in their locality.

4. INVOLVE NOT JUST THE DENR AND MGB BUT ALSO OTHER GOVERNMENT/TECHNICAL AGENCIES FOR SITE-SPECIFIC TECHNICAL ASSESSMENT AND SITE IDENTIFICATION FOR EVACUATION CENTERS

It is not enough to solely look into the data regarding rain-induced landslides susceptibility provided by DENR-MGB. Other factors should be considered such as the presence of human-induced hazards in the area, proximity in earthquake generators, and land suitability of the area.

In the case of lands, to address potential foundation problems, such as long-term settlement, **geotechnical and site-specific studies** should be conducted. Further, other types of geohazards, such as earthquake-related ground shaking and liquefaction, should also be considered to determine comprehensively the suitability of the site. The assessment for earthquake-related hazards may be referred to DOST-PHIVOLCS.

For the assessment on the presence of insurgencies (as human-induced hazard), this can be referred to the AFP for technical assessment.