



MARIANO MARCOS STATE UNIVERSITY

MMSU's Involvement in the Proposed Amendment of Section 5 of Republic Act No. 9367, Otherwise Known as the "Biofuels Act of 2006"

The Committee on Energy of the Republic of the Philippines Invited the Mariano Marcos State University to attend the 2ndTWG deliberation on House Bills Number 2180, 2059, and 7328 – Amendments to Biofuels Act on May 17, 2023.

MMSU responded positively to the invitation by sending four MMSU personnel to the meeting. On May 31, 2023, the University forwarded to the Committee on Energy its input for the Amendment of the Republic Act.



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City
19th Congress

COMMITTEE ON ENERGY

INVITATION TO THE TECHNICAL WORKING GROUP (TWG) MEETING

May 08, 2023

To the Concerned Stakeholders (Government and Private Sectors)

Sir/Madam,

Please be informed that the Committee on Energy will hold a Technical Working Group (TWG) meeting on the date, time and venue indicated hereunder:

DATE/TIME/VENUE	May 17, 2023 (Wednesday) 1:30 P.M. Speaker Nograles Hall, South Wing Annex Building
AGENDA	➤ 2 nd TWG deliberation on House Bills Numbered 2180, 2059 and 3328 – Amendments to Biofuels Act measures

Attached are the Agenda, documents requested during the previous meeting, for your reference.

Your active participation on the said meeting is highly appreciated.

The Committee Secretariat appreciates your **confirmation of attendance on or before May 12, 2023**, through email address: committee.energy@house.gov.ph or at telephone number 8931-3593. You may also contact our Committee Staff, Mr. Lorenzo Nestor G. Cortes – 09189193698 or Ms. Joy Mariano – 09176265190 for the confirmation of your attendees.

In compliance to the House Protocol for visitors, may we request for a photo of Antigen test result, if already have (24 hours prior to the date and time of visit). If attendee/s does not have an Antigen test result yet, please inform the Committee. We will request and submit to the Office of the Secretary General the list of those who will avail of the free antigen test.

Attached is the HDF for your perusal. Attached also is the Visitor Pass Form (<https://forms.gle/hkeAtpa8EiswwQLv5>) to be filled-up by your attendee/s and to be sent back to the Committee at least two (2) days prior to the scheduled Committee hearing.

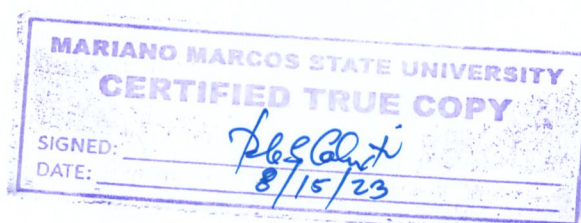
Thank you very much.

Very truly yours,

LORD ALLAN JAY Q. VELASCO
Chairperson

For the Chairperson:

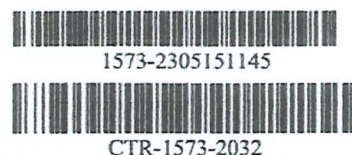
MELANIE T. AÑAIN
Committee Secretary



Rev. Bjoir Santa-Foral
Rev. Rogue Ulep.
Rep. Natividad
Mr. Juan Carigao
Please represent
MRGU. I will
be in charge of

the HNW. Our
input is
a follow
up of our
input in the
last meeting.
This is very
crucial
to plan
prepare.

Note that we
are the only
university
invited by
the Committee
to fully coordinate
w/ GSD on the
use of my service
vehicle. T.H. Jo



TRAVEL REPORT: FORMAT "C"
Attendance to Workshop(s) or Meeting(s)

For: SHIRLEY C. AGRUPIS President	Thru: NATHANIEL R. ALIBUYOG Vice-President for Research, Extension and Business PRIMA FER FRANCO Vice-President for Academic Affairs	Thru:
Prepared By: JAYSON F. CARLAGA BJORN S. SANTOS ROQUE A. ULEP NATHANIEL ERICSON R. MATEO Date: <u>May 22, 2023</u>		
Name/Title of Training	Attendance in the Second Technical Working Group (TWG) on the Amendments of the Biofuels Act measures	
Sponsoring/Implementing/Host Agency	Committee on Energy	
Date of Travel/Duration	May 16, 2023 - May 18, 2023	
Venue	Manila	



Objectives of the Meeting or Workshop

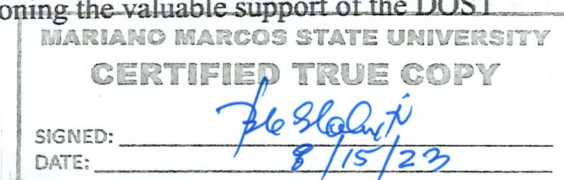
Attend the 2nd TWG deliberation on House Bills Numbered 2180, 7059 and 7328-Amendments to Biofuels Act measures

Agenda and Expected Outputs

Second TWG deliberation on House Bill Numbered 2180, 7059, and 7328- Amendments to Biofuels Act measure

Highlights of the Workshop/Meeting

One of the key highlights of the meeting was the MMSU-NBERIC team's personal testimony regarding the immense potential of hydrous bioethanol as a biofuel blend. The team also emphasized the significance of utilizing nipa as a feedstock for bioethanol production, which can help address the shortage of feedstock in bioethanol production. It is worth mentioning the valuable support of the DOST



in considering the adoption of hydrous ethanol as a biofuel blend to mitigate the impact of rising gasoline pump prices.

In the meeting, Atty. Abad, the head of the DOE, emphasized the importance of having a Philippine National Standard (PNS) for hydrous ethanol. He pointed out that the significant difference between the 0.5% water content limit in alcohol and the 4.6% water content of hydrous ethanol needs further examination, as it could potentially lead to engine failure without a defined standard. However, Dr. Ulep and Engr. Mateo countered this argument by explaining that ethanol and water form an azeotrope, meaning they are molecularly bonded due to intermolecular forces of attraction. They further highlighted that based on available data, hydrous ethanol poses no issues with fuel-injected engines. They also referenced the research work of Dr. Edwin Quiros from UPD, which suggests that hydrous ethanol as a biofuel blend is advantageous for the Philippines.

Engr. Queennie Rojo, the Executive Director of EPAP, clarified that EPAP, SRA, DOE, and MMSU have initiated discussions about establishing a separate technical working group to evaluate the potentials of hydrous ethanol as a biofuel blend. She expressed her full support for advancing the research conducted by MMSU-NBERIC on this subject.

Overall, the meeting provided a platform for an exchange of ideas and perspectives on the use of hydrous ethanol as a biofuel blend, with stakeholders sharing their insights and considering future steps for evaluation and standardization.

Nature of Participation

Resource speakers

Topics Discussed or Agreements Made

1. Additional suggestions/amendments on the working draft bill; and
2. Comments on Section 3 of the proposed draft bill, on the amendments to Section 5 of Republic Act No. 9367.

Output

1. Possible research proposal in promoting the use of hydrous ethanol as a biofuel blend and drafting a Philippine National Standard for hydrous ethanol.
2. Policy supporting nipa as feedstock for bioethanol production and adaptation of hydrous ethanol as biofuel blend.

Follow through Actions


1. Formulate a Technical Working Group: EPAP, SRA, DOE, and MMSU should establish a dedicated technical working group specifically focused on evaluating the potentials of hydrous ethanol as a biofuel blend. This group should comprise experts from various relevant disciplines to ensure a comprehensive assessment.
2. Conduct Further Research: The MMSU-NBERIC team should continue their research on hydrous bioethanol, particularly exploring its performance, emissions, compatibility with different engine types, and economic and environmental implications. This research should aim to gather more empirical data and fill any existing knowledge gaps.
3. Collaborate with DOST: Strengthen the collaboration with the Department of Science and Technology (DOST) to leverage their support and expertise. Engage in ongoing discussions with

the DOST to further explore the adoption of hydrous ethanol as a biofuel blend, considering the potential benefits in mitigating the impact of rising gasoline pump prices.

4. Establish a Philippine National Standard (PNS): Work towards the development and implementation of a Philippine National Standard for hydrous ethanol. This standard should consider the unique characteristics of hydrous ethanol, such as its water content, and ensure its safe and efficient use as a biofuel blend in the country.
5. Disseminate Findings and Promote Awareness: Share the research findings, outcomes of the technical working group, and the benefits of hydrous ethanol as a biofuel blend with relevant stakeholders, including industry players, government agencies, and the public. Raise awareness about the potential advantages and address any concerns or misconceptions related to the use of hydrous ethanol.



Republic of the Philippines
MARIANO MARCOS STATE UNIVERSITY
City of Batac 2906 Ilocos Norte

Revised 2019					Appendix 20					
ITINERARY OF TRAVEL				Date:						
				Number:						
Name	JAYSON F. CARIAGA	Position	SCIENCE RESEARCH ASSISTANT			Monthly Salary	Php 21,388.00			
Official Station	NBERIC	Residence	Bgy. No. 5 Puttao, SOLSONA, ILOCOS NORTE							
Purpose of Travel	Attend the 2nd TWG deliberation on House Bills Numbered 2180, 7059 and 7328-Amendments to Biofuels Act measures									
Date	Places to be Visited	TIME		Means of Transportation	ALLOWABLE EXPENSES					
		Departure	Arrival		Transportation Expenses	Hotel/Room Lodging Rate	Registration Fee	Meals	Incidental Expenses	Total
05/16/2023	Batac to Manila	10:00 PM	06:00 AM					220.00	440.00	660.00
05/17/2023	Manila	10:00 AM	01:00 PM			1,100.00		660.00	440.00	2,200.00
05/17/2023	Manila to Batac	12:30 AM	08:00 AM						440.00	440.00
TOTAL					0.00	1,100.00	0.00	880.00	1,320.00	3,300.00
<p>I certify that:</p> <ol style="list-style-type: none">1. I have received the foregoing itinerary.2. The travel is necessary to the service.3. The period covered is reasonable.4. The expenses claimed are proper. <p>BRIAN JAY CORPUZ Director for Administrative Services</p> <p>NATHANIEL R. ALIBUYOG Vice-President for Research, Extension and Business</p> <p>PRIMA FE R. FRANCO Vice-President for Academic Affairs</p>					<p>Prepared by:</p> <div> JAYSON F. CARIAGA</div> <p>APPROVED:</p> <p>SHIRLEY C. AGRUPIS President</p>					

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Republic of the Philippines
MARIANO MARCOS STATE UNIVERSITY
City of Batac 2906 Ilocos Norte

CERTIFICATE OF TRAVEL COMPLETED

Batac, 2906 Ilocos Norte

Date

NATHANIEL R. ALIBUYOG
Vice-President for Research, Extension and
Business

PRIMA FE R. FRANCO
Vice-President for Academic Affairs

I certify that I have completed the travel authorized in Itinerary of Travel No.: _____
dated _____ under condition indicated below.

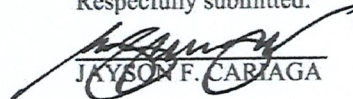
- ☐ Strictly in accordance with approved itinerary.
☐ Cut short as explained below. Excess payment in the amount of PhP _____ .00 was refunded under OR no.:
dated _____, 20____.
☐ Extended as explained below. Additional itinerary was submitted.
☐ Other deviations as explained below

Explanation or Justification

EVIDENCE OF TRAVEL:


- ☐ Used Tickets
☐ Certificate of Appearance
☐ Others: _____

Respectfully submitted:



JAYSON F. CARIAGA

On evidence and information of which I have knowledge, the travel was actually undertaken.

BRIAN JAY CORPUZ
Director for Administrative Services


NATHANIEL R. ALIBUYOG
Vice-President for Research, Extension and Business

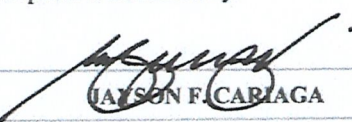

PRIMA FE R. FRANCO
Vice-President for Academic Affairs

	MARIANO MARCOS STATE UNIVERSITY Office of the President	Document Code	OP-FRM-
	TRAVEL REPORT	Revision No.	0
		Effectivity Date	August 2019

For: DR. SHIRLEY C. AGRUPIS President	Remarks:
Thru:	
NATHANIEL R. ALIBUYOG Vice-President for Research, Extension and Business PRIMA R. FRANCO Vice-President for Academic Affairs	

TRAVEL INFORMATION	
Name of Employee: JAYSON F. CARIAGA	TO No. & Date: 1573-2305151145 05/15/2023
Nature of Travel: Official Business	Means of Travel: MMSU Vehicle
Inclusive Date of Travel: 05/16/2023 - 05/18/2023	Expenditures(Total): Fare: Gasoline: Own Per Diem: Driver's Per Diem: Registration Fee: Others:
Destination: Manila	
Purpose: Attend the 2nd TWG deliberation on House Bills Numbered 2180, 7059 and 7328-Amendments to Biofuels Act measures	
nth Travel: () This week; () This month; () This year; () For the same purpose/s	
Follow-up Travel: () Yes () No Expected Date:	Source/s of Funds: Fund 101

ITINERARY				
Date	Time	Place	Activity	Person/s Met & Office/Agency

REPORT PROPER (see attached)		
Prepared & Submitted by:  JAYSON F. CARIAGA SCIENCE RESEARCH ASSISTANT	Noted by:	Noted by: SHIRLEY C. AGRUPIS University President
Date:		Date:

fos Cariaga 6/6



REFERENCE NUMBER.: 1573-2305151145

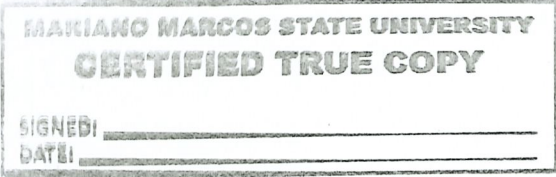
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Mariano Marcos State University
City of Batac 2906 Ilocos Norte

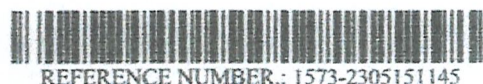
TRAVEL ORDER/REQUEST		Date Prepared		May 15, 2023	
Name of Faculty/Employee: (Signature above Printed Name)		1JAYSON F. CARIAGA 2BJORN S. SANTOS 3ROQUE A. ULEP 4NATHANIEL ERICSON R. MATEO			
Position/Designation		1SCIENCE RESEARCH ASSISTANT 2PROFESSOR V 3ASSOCIATE PROFESSOR V 4ASSOCIATE PROFESSOR IV			
Purpose of Travel:		Attend the 2nd TWG deliberation on House Bills Numbered 2180, 7059 and 7328-Amendments to Biofuels Act measures			
Destination:		Manila			
Inclusive Dates of Travel:		16 May 2023 05PM - 18 May 2023 11PM			
Nature of Travel:		<input checked="" type="checkbox"/> Official Business	<input type="checkbox"/> Official Time	Source of Fund	Fund 101
Funds Available: (Signature above Printed Name)		IMELDA C. CORPUZ Chief, Accounting Office			
Mode of Transportation		MMSU Vehicle		Plate No.	
Recommend Approval:		APPROVED: BY AUTHORITY OF THE PRESIDENT NATHANIEL R. ALIBUYOG Vice-President for Research, Extension and Business SHIRLEY C. AGRUPIS President			

CERTIFICATE OF APPEARANCE

This is to certify that JAYSON F. CARIAGA BJORN S. SANTOS ROQUE A. ULEP NATHANIEL ERICSON R. MATEO personally appeared at:

Destination	Date	Certifying Officer	
		Name in Print	Signature
COMMITTEE SECRETARY	05/17/23	MS. MELANIE T. ANJAIN	





REFERENCE NUMBER.: 1573-2305151145

TRAVEL HISTORY
as of May 2023

Name of Faculty/Employee: **JAYSON F. CARIAGA**
Total Travel(This Year): **8**

Purpose/Destination	Nature	Fund	Date
To attend the Mini-Workshop on Bioresource Application and Utilization at Mishima, Japan MISHIMA, JAPAN	O.B.	Fund 184	May 28 - Jun 04, 2023
To attend the Luzon Regional Scientific Meeting (RSM) with the theme, Science and Technology for Democracy. Baguio City	O.B.	Fund 101	May 17 - May 19, 2023
1. Fetch and assist DOST Balik Scientist, Dr. Sergio S. Capareda. 2. Pick up and inspect some of the needed equipments for the MMSU-COASTER program. Metro Manila	O.B.	Fund 101	Apr 23 - Apr 26, 2023
Pick-up and inspect equipment for the MMSU-COASTER Program Los Baños, Laguna	O.B.	Fund 101	Apr 23 - Apr 26, 2023
To participate and facilitate Advanced Training in Probiotics Research, Development, and Innovation at UP Manila. Manila	O.B.	Fund 184	Apr 16 - Apr 20, 2023
To collect Nipa sap which will serve as samples for the isolation of candidate probiotics strains. Aparri, Cagayan	O.B.	Fund 184	Apr 14 - Apr 14, 2023
Attend consultative meeting about the bioethanol research program of MMSU at the Sugar Regulatory Administration Main Office SRA Main Office, Quezon City, Philippines	O.B.	Fund 101	Mar 26 - Mar 28, 2023
Attend the bioethanol industry performance monitoring and planning workshop conducted by the Sugar Regulatory Commission Tagaytay City, Cavite	O.B.	Fund 101	Jan 16 - Jan 20, 2023

Name of Faculty/Employee: **BJORN S. SANTOS**
Total Travel(This Year): **5**

Purpose/Destination	Nature	Fund	Date
To attend the 72nd PSABE Annual National Convention. SMX Mall of Asia, Pasay City	O.B.	Fund 101	Apr 22 - Apr 29, 2023
Proposal Presentation at DA-SRA (Sugar Regulatory Administration) DA-SRA Office, Diliman, Quezon City	O.B.	Fund 101	Mar 26 - Mar 28, 2023
Attend meeting and presentation re: BRDE Liens Funded Proposal at SRA Diliman, Quezon City	O.B.	Fund 101	Mar 26 - Mar 28, 2023
To conduct Technical and Socio-economic assessment on the implemented renewable energy programs and projects, and documentations. Bacnotan, La Union (DMMMSU) and La Trinidad, Benguet (BSU)	O.B.	Fund 184	Feb 15 - Feb 17, 2023
To attend the ICIEERD 1st Joint Management Council Meeting. Saint Louis College, San Fernando, La Union	O.B.	Fund 101	Jan 27 - Jan 27, 2023

Name of Faculty/Employee: **ROQUE A. ULEP**
Total Travel(This Year): **6**



MARIANO MARCOS STATE UNIVERSITY

Office of the President

31 May 2023

HON. KRISTINE SINGSON-MEEHAN

Deputy Speaker and TWG Chairperson

Committee on Energy

House of Representatives

Thru: **MS. MELANIE T. AÑAIN**

Committee Secretary

Dear Hon. Singson-Meehan:

Warm greetings from Mariano Marcos State University (MMSU)!

Our apologies for the late response to your letter. Our team at MMSU carefully studied the proposed bill in order to remain faithful to the declared policy of the Biofuel Act of 2006. Attached is MMSU's suggestion on the wording of the Proposed House Bill which will amend RA 9367.

Thank you very much.

Very truly yours,


SHIRLEY C. AGRUPIS
President



Republic of the Philippines
House of Representatives
Quezon City, Metro Manila

NINETEENTH CONGRESS
First Regular Session

House Bill No. _____

(As prepared by the Committee on Energy in substitution of
House Bills No. 2180, 7059 and 7328)

Introduced by Representatives Ralph G. Recto, Lord Allan Jay Q. Velasco, Kristine Singson-Meehan, Lex Anthony Cris A. Colada

AN ACT
AMENDING SECTION 5 OF REPUBLIC ACT NO. 9367, OTHERWISE KNOWN AS THE
“BIOFUELS ACT OF 2006”

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

Section 1. **Short Title.** – This Act shall be known as the “*Affordable Fuel*” Act.

Sec. 2. **Declaration of Policy.** – It is hereby declared the policy of the State to protect public interest by providing reasonably-priced petroleum products as may be determined by NBB and DOE. Towards this end, the State shall implement policies and programs to ensure the delivery of affordable clean and PNS-compliant fuel to the public.

Sec. 3. Section 5 of Republic Act (RA) No. 9367, otherwise known as the “*Biofuels Act of 2006*” is hereby amended to read as follows:

“Sec. 5. **Mandatory Use of Biofuels.** – Pursuant to the above policy, it is hereby mandated that all liquid fuels for motors and engines sold in the Philippines shall contain locally-sourced biofuels components as follows:

“5.1 Within two years from the effectivity of RA No. 9367, at least five percent (5%) bioethanol shall comprise the annual total volume of gasoline fuel actually sold and distributed by each and every oil company in the country, subject to the requirement that all bioethanol blended gasoline shall contain a minimum of five percent (5%) bioethanol fuel by volume: Provided, That the ethanol blend conforms to PNS.

“5.2 Within four years from the effectivity of RA No. 9367, the NBB created under this Act is empowered to determine the feasibility and thereafter recommend to DOE to mandate a minimum of ten percent (10%) blend of bioethanol by volume into all gasoline fuel distributed and sold by each and every oil company in the country.

“In the event of supply shortage of locally-produced bioethanol during the four-year period, oil companies shall be allowed to import bioethanol, but only to the extent of the shortage as may be determined by the NBB.

5.3 To secure continuous ample supply of locally produced bioethanol, DOE through the NBB in collaboration with academic research institution and industry shall expand the provisions of Section 3.e and Section 3.q. of the RA 9367 by establishing PNS for hydrous bioethanol and utilization of other feedstock, respectively, for bioethanol production.

5.4. In the event of a supply shortage, and after conducting a thorough exploration of locally-sourced feedstock in accordance with the aforementioned provision, oil companies shall be granted the opportunity to import bioethanol. Similarly, bioethanol distilleries shall be allowed to import bioethanol components, but within the parameters of the determined shortage as stipulated by the NBB.

“5.5 Within three months from the effectivity of RA No. 9367, a minimum of one percent (1%) biodiesel by volume shall be blended into all diesel engine fuels sold in the country: *Provided*, That the biodiesel blend conforms to PNS for biodiesel.

“Within two years from the effectivity of RA No. 9367, the NBB created under RA No. 9367 is empowered to determine the feasibility and thereafter recommend to DOE to mandate a minimum of two percent (2%) blend of biodiesel by volume which may be ~~increased taking into account considerations including but not limited to domestic supply and availability of locally-sourced biodiesel component~~ increased thereafter by NBB taking into consideration the Philippine Energy Plan (PEP) of 2015 proposing higher CME blend not exceeding 5% . TPBA PROPOSED AMENDMENTS

“PROVIDED, THAT THE PRESIDENT, UPON THE RECOMMENDATION OF THE NBB AND THE DOE, WITH CONCURRENCE OF NEDA, MAY SUSPEND THE IMPLEMENTATION OF THIS SECTION, ~~OR ANY PART THEREOF~~ IN THE EVENT OF HYPERINFLATION OF FUEL PUMP PRICES, THROUGH AN EXECUTIVE ORDER, FOR A TRANSITION PERIOD DEEMED APPROPRIATE BY NBB WHICH SHALL THEN

Commented [1]: recommended that only the mandatory blend be suspended in case of abnormal inflation.

Commented [2]: recommend to use HYPERINFLATION instead
-a condition where the price of everything in a national economy goes out of control and increases very quickly (Cambridge Dictionary)

BE RESPONSIBLE FOR THE IMMEDIATE LIFTING OF SUSPENSION WHEN PRICES NORMALIZE AS DECLARED BY NEDA. PROVIDED FURTHER, THAT THE SUSPENSION SHALL BE RESORTED TO ONLY WHEN THE NBB DETERMINES THAT THE PRODUCTION OF BIOETHANOL AND BIOFUEL BLEND IS SIGNIFICANTLY MORE EXPENSIVE THAN THE FUEL PUMP PRICE. ~~[PERIOD NOT LONGER THAN ONE (1) YEAR, IF, AS A RESULT OF ITS IMPLEMENTATION, THE PRICE OF BLENDED GASOLINE AND/OR DIESEL ENGINE FUELS WILL BE HIGHER BY AT LEAST FIVE PERCENT (5%) COMPARED TO PURE GASOLINE AND/OR DIESEL ENGINE FUELS.]~~ TPBA PROPOSED AMENDMENTS

Sec. 4. ***Implementing Rules and Regulations.*** – The Department of Energy, in consultation with the National Biofuels Board, the stakeholders and other agencies concerned, shall, within thirty (30) days from the effectivity of this Act, promulgate the rules and regulations to effectively implement the provisions of this Act.

Sec. 5. ***Separability Clause.*** - If any provision of this Act is declared unconstitutional or invalid, the other parts or provisions hereof which are not affected thereby shall continue to be in full force and effect.

Sec. 6. ***Repealing Clause*** – All laws, decrees, ordinances, rules, regulations, other issuances or parts thereof which are inconsistent with this Act are hereby repealed, amended or modified accordingly.

Sec. 7. ***Effectivity.*** – This Act shall take fifteen (15) days following its complete publication in the *Official Gazette* or in a newspaper of general circulation.