



USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Voluntary Report - public distribution

Date: 5/3/2004

GAIN Report Number: RP4019

Philippines

Oilseeds and Products

GRP Promotes Biodiesel Use

2004

Approved by:

David C. Miller
FAS Manila

Prepared by:

Perfecto G. Corpuz

Report Highlights:

On February 9, 2004, President Gloria Macapagal-Arroyo signed Memorandum Circular No. 55 directing all government vehicles to incorporate the use of one percent by volume, coconut methyl ester in their diesel requirements. Shortly thereafter, the Department of Energy, the lead implementing agency, issued Department Circular No. DC 2004-04-003 or the implementing rules and regulations of MC 55.

Includes PSD Changes: No
Includes Trade Matrix: No
Unscheduled Report
Manila [RP1]
[RP]

On February 9, 2004, President Gloria Macapagal-Arroyo signed Memorandum Circular No. 55 (MC 55) directing all GRP departments, bureaus, offices and instrumentalities of the government to incorporate the use of one percent by volume, coconut methyl ester (CME) in their diesel requirements. MC 55 aims to create a new market for coconut farmers and at the same time promote the GRP's desire for cleaner air. The lead agency tasked to implement the CME program is the Department of Energy (DOE).

During public consultations, local oil companies expressed concerns that coco-diesel may end up being more expensive than conventional diesel. In a statement, the Philippine Institute of Petroleum (PIP), the local association of oil companies, said the government should first "closely examine" the long-term implications of coco-diesel, because it would make fuel more expensive.

Oil companies claimed that their studies show that a 1 percent blend of CME for every liter of auto diesel will result in an additional cost of P0.50 (\$0.009) per liter over current retail prices. This excludes other CME handling and storage expenses, according to PIP Executive Director Rey Marquez.

The full text of MC 55 follows:

**MALACANANG PALACE
MANILA
BY THE PRESIDENT OF THE PHILIPPINES
MEMORANDUM CIRCULAR NO. 55**

**DIRECTING ALL DEPARTMENTS, BUREAUS, OFFICES AND INSTRUMENTALITIES OF
THE GOVERNMENT, INCLUDING GOVERNMENT-OWNED AND CONTROLLED
CORPORATIONS TO INCORPORATE THE USE OF ONE PERCENT (1%) BY VOLUME
COCONUT METHYL ESTER IN THEIR DIESEL REQUIREMENTS**

WHEREAS, under Section 2(a) of R.A. No. 7638, known as the "Department of Energy Act of 1992", it is declared the policy of the State to ensure a continuous, adequate and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the integrated and intensive exploration, production, management and development of the country's indigenous energy resources, without sacrificing ecological concerns;

WHEREAS, under Sections 2 and 4(a) of R.A. No. 8749, known as "The Philippine Clean Air Act (PCAA) of 1999", it is declared the policy of the State to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature and recognize the citizens' right to breath clean air;

WHEREAS, the government is a major user of motor vehicles operating on diesel fuel;

WHEREAS, the Coconut Methyl Ester (CME) blended with petroleum diesel fuel can reduce harmful emissions such as carbon particulates and greenhouse gases thereby improving air quality and at the same time improving the performance of the engines;

WHEREAS, the use of CME in the petroleum industry will create a new and significant application for coconut oil and reinvigorate the Philippine coconut industry through the creation of a new domestic market and increased productivity, thereby improving the lives of coconut farmers.

NOW, THEREFORE, I, GLORIA MACAPAGAL-ARROYO, President of the Republic of the Philippines, by virtue of the powers vested in me by law, do hereby order:

SECTION 1. All departments, bureaus, offices and instrumentalities of the Government, including government-owned and controlled corporations, are hereby directed to use one percent (1%) CME by volume as a blend in petroleum diesel fuel.

SEC. 2. The Department of Energy (DOE) shall be the lead implementing agency for the CME-Diesel Program. The DOE shall coordinate with various government agencies and private entities involved in CME activities and shall prepare a strategic plan outlining national goals in the development and expanded utilization of CME and provide policy direction for the effective implementation and monitoring of the program.

SEC. 3. The Philippine Coconut Authority (PCA) is hereby directed to include in its national program for the coconut industry the development of the supply chain for CME, and in consultation/coordination with the other government agencies and the private sector, shall formulate a program to encourage investment and technology for the production of CME to meet the needs of the domestic market.

SEC. 4. The DOE, in coordination, with the concerned government agencies shall formulate and issue the necessary implementing rules and regulations within thirty (30) days after the effectivity of this Circular.

SEC. 5. All departments, bureaus, offices and instrumentalities of the Government, including government-owned and controlled corporations, are hereby directed to provide the necessary resources which will be utilized to implement the CME program subject to existing auditing and accounting rules and regulations.

SEC. 6. All orders, issuances, rules and regulations or parts thereof, which are inconsistent with this Circular are hereby repealed or modified accordingly.

SEC. 7. If for any reason or reasons, any part of this circular is declared unconstitutional or invalid, the validity of the other provisions shall not be affected by such declaration.

SEC. 8. This Memorandum Circular shall take effect fifteen (15) days after its publication in at least two (2) newspapers of general circulation.

DONE in the City of Manila, this 9th day of February, in the year of Our Lord, Two Thousand and Four.

(Sgd.) **GLORIA MACAPAGAL-ARROYO**

By the President:
(Sgd.) **ALBERTO G. ROMULO**
Executive Secretary

Nationwide consultations were held on how to implement MC 55 and on March 29, 2004, the DOE issued Department Circular No. DC 2004-04-003 or the Rules and Regulations Implementing MC 55. PIP Director Marquez reportedly noted some vagueness in the

implementing rules of MC 55 in relation to standards on the packaging and safe handling of CME. There likewise remains questions on liabilities should any damage attributed to CME occur on vehicle engines.

Following is the full text of the DOE's implementing rules and regulations:

**Republic of the Philippines
DEPARTMENT OF ENERGY**

DEPARTMENT CIRCULAR NO. DC 2004-04-003

**RULES AND REGULATIONS
IMPLEMENTING MEMORANDUM CIRCULAR NO. 55**

Pursuant to Section 4 of Memorandum Circular No. 55 issued by the Office of the President on February 9, 2004, directing all departments, bureaus, offices, agencies and instrumentalities of the government, including government-owned and controlled corporations to incorporate the use of one percent (1%) by volume Coconut Methyl Ester in their diesel requirements, the Department of Energy, in consultation with concerned government agencies and private entities, hereby promulgates and adopts the following rules and regulations.

SECTION I. TITLE

This Department Circular shall be known and cited as the RULES AND REGULATIONS IMPLEMENTING MEMORANDUM CIRCULAR NO. 55.

SECTION 2. OBJECTIVE

The purpose of this Department Circular is to provide guidelines on the implementation of Memorandum Circular No. 55.

SECTION 3. SCOPE AND COVERAGE

This Department Circular shall apply to all land transport diesel vehicles owned or registered in the name of all departments, bureaus, offices, agencies and instrumentalities of the government, including government-owned and controlled corporations and local government units.

SECTION 4. DEFINITION OF TERMS

- a. "Coconut Methyl Ester or CME" – as defined by PNS 2020:2003, shall refer to fatty ester derived from coconut oil whose alkyl groups range in varying percentage from C8 to C18 suitable for compression ignition engines and other similar types of engines.
- b. "CME Diesel" – shall refer to diesel fuel with 1% blend of coconut methyl ester. The ratio of CME-Diesel blend is thus defined as 1% CME and 99% of diesel fuel.
- c. "Product Registration" – shall refer to the fuel additive registration requirement under Section 12 of Republic Act (R.A.) No. 8479 (Downstream Oil Industry Deregulation Law of 1998) and Section 27 of R.A. No. 8749 (Philippine Clean Air Act of 1999).

- d. "Accreditation" – shall refer to the certification issued to a CME manufacturer/supplier having complied with the prescribed technical criteria (to include, among others, capability to manufacture PNS-compliant CME, distribution network, etc.) of the DOE.
- e. "PNS" – shall refer to the Philippine National Standard established by the inter-agency committee Technical Committee on Petroleum Products and Additives (TCPPEA), created pursuant to R.A. No. 8749, on quality parameters, values, and limits of petroleum products including CME.
- f. "Diesel Requirements" – shall refer to the diesel fuel consumption of all land transport diesel vehicles as defined in Section 3 of this Department Circular.

SECTION 5. ROLES AND RESPONSIBILITIES OF AGENCIES

The Department of Energy (DOE), created pursuant to R.A. No. 7638, shall be the lead implementing agency for the CME Program in petroleum applications beginning with the CME-Diesel blend. The DOE shall coordinate with various government agencies and private entities involved in CME activities and shall provide policy direction for the effective implementation of the program. The DOE shall register CME products, accredit CME manufacturers/suppliers and monitor the quality of CME. The DOE shall prepare a strategic plan outlining national goals in the development, utilization and promotion of CME.

The Department of Environment and Natural Resources (DENR), created pursuant to E.O. No. 192, shall coordinate with DOE and DOTC in terms of data generation of the results of emission testing using CME which will serve as inputs in the emission standard-setting necessary to maintain air quality.

The Department of Science and Technology (DOST), created pursuant to R.A. No. 2067, through the Philippine Council for Industry and Energy Research and Development (PCIERD) and Industrial Technology Development Institute (ITDI), shall coordinate and provide support on research and development works on the production and application of CME being undertaken by the academe, research institutions and others.

The Department of Transportation and Communications (DOTC), created pursuant to Executive Order Nos. 546 and 125-A shall monitor and test emissions of CME-Diesel-run vehicles and provide DOE with annual statistics and inventory of land transport vehicles owned and registered in the name of all departments, bureaus, offices, agencies and instrumentalities of the government, including government-owned and controlled corporations and local government units.

The Department of Trade and Industry (DTI), created pursuant to Executive Order No. 133, through the Board of Investments (BOI) may provide incentives to investment on CME production in conjunction with coconut processing provided that the resulting CME product conforms to PNS 2020:2003 promulgated by the Bureau of Product Standards (BPS).

The Department of Finance (DOF), created pursuant to Administrative Order Nos. 127 and 127-A, shall develop and recommend fiscal and nonfiscal incentives as it may deem appropriate for participating petroleum and oleochemical companies to promote the sustainable development of this program.

The Philippine Coconut Authority (PCA), created pursuant to Presidential Decree No. 232, in partnership with coconut farmers, processors, refiners and traders shall ensure security of coconut oil supply by undertaking an aggressive program for planting, replanting, fertilization, agricultural research and development, and rehabilitation of the coconut industry and shall formulate a program to encourage investments and technology for the production of CME to meet the needs of the domestic market.

SECTION 6. SUPPLY AND DISTRIBUTION OF 1% CME-DIESEL

In the supply and distribution of 1% CME-Diesel the following guidelines shall be observed:

- a. Each government agency shall be solely responsible for the blending of CME for its diesel fuel requirements.
- b. CME suppliers shall ensure sufficient supply and efficient distribution of CME based on the government agency's specific requirements including storage, mode of procurement and existing logistics and infrastructure.
- c. CME suppliers shall make the product available in small packages for government agencies without storage tanks/dispensing pumps, in recyclable/refillable containers.
- d. CME requirements of the government agencies including government-owned and controlled corporations and their subsidiaries shall only be procured from DOE-accredited suppliers of DOE-registered CME products.
- e. The DOE Energy Utilization Management Bureau (EUMB) shall issue accreditation to CME manufacturers/suppliers subject to the applicant's submission of an effective distribution scheme, IEC and after-sales support program, among others.
- f. The DOE shall provide all government agencies with list of accredited CME manufacturers/suppliers and registered CME products.

SECTION 7. MECHANICS OF BLENDING

CME can be blended directly in the diesel fuel tank or may be pre-blended with diesel fuel using the table below as guide.

Table for Blending 1% CME

Diesel (in liters)	5	10	15	20	25	30	35	40	50
CME (in milliliters)	50	100	150	200	250	300	350	400	500

**For simplicity in implementation, above CME volume (in milliliters) were rounded off.*

SECTION 8. CME QUALITY MONITORING

To ensure appropriate quality, government agencies shall procure CME only from suppliers accredited by the DOE-EUMB and whose CME has been duly registered by the DOE Oil Industry Management Bureau (OIMB) pursuant to R.A. No. 8479 and R.A. No. 8749. CME

products shall be properly labeled (i.e., DOE registration number, supplier and accreditation number, batch information/details including manufacture and expiry date, etc.) and must be accompanied by a Quality Certificate indicating the level for its properties (e.g., flash point, water and sediment, kinematic viscosity, copper strip corrosion, cloud point, acid number, free and total glycerine).

The DOE OIMB and Energy Research and Testing Laboratory Services (ERTLS) shall conduct random spot sampling and laboratory testing and analysis of CME products both at the manufacturing and distribution/marketing levels to determine compliance with PNS. The DOE Visayas and Mindanao Field Offices (VFO/MFO) shall conduct the sampling of CME products in their respective areas and forward the same to ERTLS. A monthly summary report shall be submitted to the Policy Advisory Group. The report shall contain the following information:

- a. Source of CME and diesel;
- b. Purchase price;
- c. Volume of CME and diesel fuel consumption;
- d. Mileage; and
- e. General observations (e.g., emissions, engine performance, among others).

SECTION 10. INFORMATION DATABASE

The DOE, in coordination with DOTC, DOST, DENR, PCA and other concerned entities, shall develop a database on vehicle information and CME-diesel fuel source and volume requirements of government agencies including government-owned and controlled corporations and other related data which shall be accessible to the public in accordance with the guidelines provided in the rules implementing R.A. No. 6713, otherwise known as the Code of Conduct and Ethical Standards for Public Officials and Employees.

DOE, in coordination with concerned entities, shall conduct audit on the data gathered and determine the integrity and accuracy of such data.

SECTION 11. POLICY ADVISORY GROUP

A Policy Advisory Group is hereby created to provide policy guidance in the implementation of this Department Circular. It shall be headed by a DOE Undersecretary to be assisted by second-ranking officials of DENR, DOST, DOTC, DTI, DOF, PCA, representative of the Office of the President and the CME manufacturers/suppliers.

SECTION 12. WORKING GROUP

A Working Group, to be chaired by DOE and composed of DENR, DOST-PCIERD/ITDI, DOTC, DTI-BOI/BPS, DOF, PCA, DBM, DILG, DND, academe/research institutions (Technological University of the Philippines, Asian Institute of Petroleum Studies, Inc., Philippine National Oil Company – Energy Research and Development Center), oil companies, CME producers/suppliers, Chamber of Automotive Manufacturers of the Philippines, Inc. (CAMPI), transport groups and other concerned entities, shall be created to:

- a. Formulate a strategic plan outlining the national goals in the development of CME;

- b. Conduct field tests and evaluate CME-related research/activities of various research and development institutions;
- c. Evaluate the effects of CME on engines and fuel systems including, but not limited to, engine performance (power, torque and durability), emissions, safety (storage, transport/handling and use) and economics (cost-benefit);
- d. Formulate procedures and methodologies for monitoring emissions and operational performance;
- e. Formulate safety standards in the storage, transport/handling, packaging and use of CME products;
- f. Conduct information, education and communication (IEC) activities to induce public awareness;
- g. Identify and address concerns of stakeholders (i.e., oil companies and car manufacturers) on the national CME program (i.e., product liability, supply sustainability, etc.);
- h. Submit quarterly assessment reports and recommendations to the Policy Advisory Group;
- i. Perform other CME-related functions as may be assigned by the Policy Advisory Group.

SECTION 13. BUDGET APPROPRIATION

Budget for the implementation of this program shall be chargeable to the available funds of the respective agencies subject to the usual accounting and auditing rules and regulations.

The procurement and supply of CME and diesel shall be done in accordance with R.A. No. 9184, otherwise known as the Government Procurement Reform Act and its implementing rules and regulations.

SECTION 14. SANCTIONS

Any person who violates any provision of this Department Circular shall be imposed the corresponding criminal, civil and/or administrative sanctions as provided under existing applicable laws, rules and regulations.

SECTION 15. FINAL PROVISIONS

All Department orders, rules and regulations inconsistent with or contrary to the provisions of this Department Circular are hereby repealed and modified accordingly.

If any provision of this Department Circular or the application of said provision to any person or circumstances is declared unconstitutional, the remainder of the Circular or the application of such provision to other persons or circumstances shall not be affected by the said declaration.

SECTION 16. EFFECTIVITY

This Department Circular shall take effect ninety (90) days from the date of its publication in at least two (2) newspapers of general circulation.

The duration of this program shall be one (1) year from the effectivity of this Department Circular.

Fort Bonifacio, Taguig, Metro Manila, March 29, 2004.

VICENTE S. PEREZ, JR.
Secretary