Republic of the Philippines
Department of Science and Technology
INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
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CITIZEN'S CHARTER

CERTIFICATION
INTERNATIONAL
ISO 9001:2008
CIP/4218/09/02/625

Our Business is Industry

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ITDI HISTORY

The Industrial Technology Development Institute or ITDI is one of the research and development institutes (RDIs) under the Department of Science and Technology. By virtue of Executive Order No. 128 dated January 30, 1987, ITDI is mandated to render a variety of services to local industries. It is the flagship agency of the Department, generating a large pool of technologies while providing technical services to industry.

1987 to Present - The NSTA was reorganized into the Department of Science and Technology (DOST) by virtue of Executive Order Number 128 dated 30 January 1987.

Under this reorganization, NIST was renamed **Industrial Technology Development Institute (ITDI)** and remained one of the R&D institutes under the DOST. All centers were abolished and ITDI now has ten (10) technical divisions with (MSRI) now absorbed by ITDI. Seven (7) divisions to undertake R&D activities, three (3) to render technical services and two (2) support divisions were created.

1982 - By virtue of Executive Order Number 784 dated 17 March 1982, the NSDB was reorganized into the National Science and Technology Authority (NSTA). Under the reorganization NIST remained as one the R&D Institutes under the NSTA. As reorganized, research on agriculture was transferred to UPLB while the ceramics center emerged into an independent institute (MSRI).The Biological and Industrial research center were also abolished and in their place, three (3) centers were created namely: the National Research and Development (NRDC), Chemical Research and Development Center (CRDC), and the National Standards and Testing Center (NSTC). Under the NRDC and CRDC are seven(7) programs to undertake R&D activities, while the NSTC provides standardization and technical services.

1973 - As part of the overall reorganization of the Executive branch of the government, the NIST was reorganized, but retained the same name. With the merger of the Agriculture Research Center, Biological Research Center and Medical Center, only two (2) technical R&D centers remained, namely Biological Research Center and Industrial Research Center. In addition, these were the Tests and Standards Laboratory and the Scientific Instrumentation Division to provide standardization and technical services.

1958 - Under the so-called "Magna Carta of Philippine Science" RA 1067, NSB was reconstituted as the National Science Development Board (NSDB) which was designed to coordinate and supervise all scientific activities in the country. NSIRI became the **National Institute of Science and Technology (NIST)** under the supervision of NSDB.

1956 - Congress approved RA Number 1606 authorizing the establishment of the National Science Board (NSB). IST was changed to the **National Scientific and Industrial Research Institute (NSIRI)**, and was placed under supervision of NSB.

1951 - The IS was renamed **Institute of Science and Technology (IST**) by virtue of Executive Order No. 392 and for the first time primarily concerned itself to industry-oriented research.

1947 - The BS was transformed into the **Institute of Science (IS)** by virtue of Executive Order No. 94.

1934 - The headship of the BS was passed on for the first time to a Filipino chemist. Dr. Angel S. Arguelles. The present-day Bureau of Soils, Bureau of Mines, Bureau of Fisheries and National Survey Division of Education Museum developed initially as part of the Bureau of Science during the pre-war years.

1905 - By virtue of the Philippine Commission Act. No. 1407, the BGL was reorganized into the **Bureau of Science (BS)** and expanded its functions to include the Bureau of Mines and the Ethnological Survey Division of Education.

1901 - 1st of July - **The Bureau of Government Laboratories (BGL)** came into existence through the Philippine Commission Act. No. 156. It was composed of the biological and chemical laboratories, a science library, and the Serum Laboratory of the Board of Health.

MISSION STATEMENT

To make local industries globally competitive.

VISION STATEMENT

Excellence in propelling development as provider of technologies and services for the industry.

CORPORATE OBJECTIVES

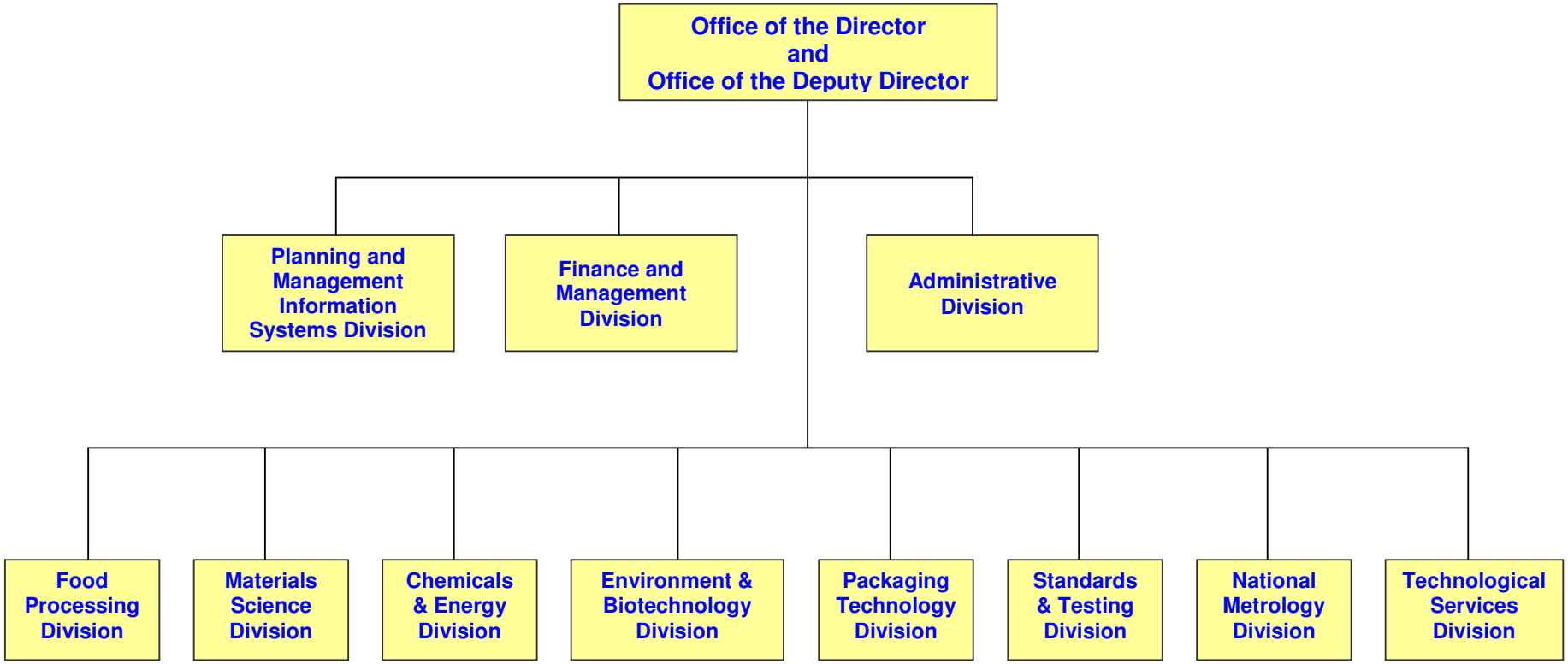
1. To attain a "very satisfactory" customer satisfaction rating for the year through the continual improvement of our Quality Management System (QMS).

2. To deliver required services according to mutually agreed terms and conditions and existing applicable statutory and regulatory requirements.

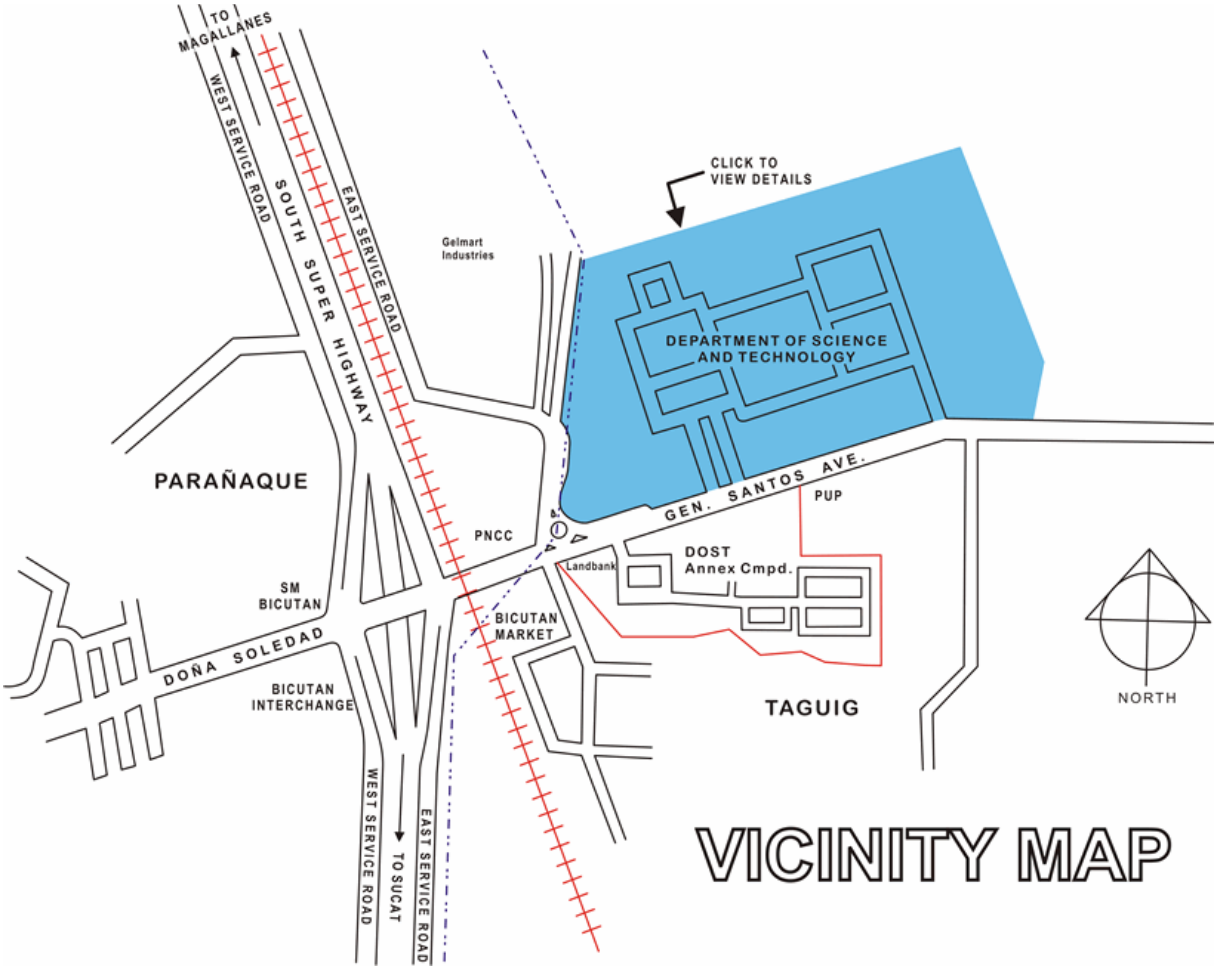
QUALITY POLICY

We are committed to provide innovative technologies and services in the areas of food, materials, chemicals, energy, biotechnology, environment and packaging to both private and government sectors with the highest standards of quality and reliability within our capabilities and resources according to customer and all applicable regulatory and statutory requirements and to continually improve the effectiveness of our QMS at all times in order to meet customer satisfaction.

ORGANIZATIONAL STRUCTURE



LOCATION


TO MAGALLANES
WEST SERVICE ROAD
SOUTH SUPER HIGHWAY
EAST SERVICE ROAD
CLICK TO VIEW DETAILS
Gelmart Industries
DEPARTMENT OF SCIENCE AND TECHNOLOGY
PARAÑAQUE
GEN. SANTOS AVE.
PUP
PNCC
Landbank
DOST Annex Cmpd.
SM BICUTAN
BICUTAN MARKET
DOÑA SOLEDAD
BICUTAN INTERCHANGE
TAGUIG
NORTH
WEST SERVICE ROAD
TO SUCAT
EAST SERVICE ROAD
VICINITY MAP

ITDI SERVICES

In support of the ITDI mission, the Institute provides various services or interventions to industry to help modernize the production sector and improve their productivity :

Research and Development (R&D)

Multidisciplinary applied research in the fields of industrial manufacturing, mineral processing, energy and environment, using local raw materials.

Technology Transfer and Contract Projects

Transfer of mature technologies with techno-economic viability, from product/process development to techno-assessment to commercialization.

Tests and Analyses

Recognized as the national agency for tests and analyses, ITDI plays a critical role in product standardization and testing by providing analytical and testing services to industry and government agencies for various products and materials.

Food Engineering Services

A package of services offered to the local food industry and other institutions that provide them with technical assistance to improve product quality and productivity in their operations, and enable them to comply with the stringent Sanitary and Phytosanitary System requirements of international trading under the World Trade Organization (WTO). Such services include engineering consultancy and technical advisory, process development and scale up, design and fabrication of food processing equipment, and design, layout and set up of processing plant.

Metrology

As national custodian for weights and measures, ITDI's program on metrology responds to the call for accuracy and traceability in the units of measurement (e.g. mass, length, volume) for product standardization, higher quality and competitiveness of local products, and protection of the consumers.

Process Engineering

This program is a tool to solve production bottlenecks or shop floor problems and to translate ITDI developed processes into production systems. Through this program, ITDI integrates waste treatment systems, safety measures and process control systems in the enterprise modules. It also touches on the development of complex design systems that can be used for a wide range of products or a wide variety of processes in a plant. (link to foods).

Post Harvest Handling/Near Farm Processing/Packaging

This provides encompassing solutions to problems on maintaining the quality and extending the shelf life of fresh produce from the time and place of harvest to the time and place of consumption, with minimum loss, maximum efficiency and maximum returns to all involved. Processing and marketing problems of seasonal crops are addressed by providing alternative solutions such as developing value-adding qualities to the product to ensure continuous supply beyond the harvest season.

Packaging Research and Development

Improvement of packaging system, implementation of tools of modern and innovative packaging technologies and label design to upgrade the global competitiveness of local products and institutionalizing linkages locally and abroad.

Cleaner Production (CP)

Promotion of sustainable development and strengthening of competitiveness of local industries by providing technical information and assistance in adopting CP technologies.

Advanced Device and Materials Testing Laboratory (ADMATEL)

A national testing laboratory equipped with advanced analytical equipment for failure analysis (FA) and materials characterization. It is established to reinforce and upgrade the FA and materials testing facilities of our local industry, provide shorter turn-around time for analysis, offer less expensive services, and attract potential investors seeking for a more conducive business environment.

Enterprise Module (EM)

Designed for technology to spin off from the laboratories to industry. Offers tenancy to prospective investors to set up their own business, with close supervision and mentoring. Available Ems: fruit juice processing, basi and sugarcane juice, vinegar acetator, soap, glass blowing, bioreactor, ceramics, smoked fish, and virgin coconut oil.

Energy Audit

A critical examination of an energy consuming facility to help improve energy efficiency and productivity by identifying areas where energy waste can occur and recommend energy saving opportunities. Services offered include audit of complete facility, energy equipment like boilers, dryers, motors and building, technical evaluation of energy conservation projects, and in-house training.

Industry Training and Skills Development

Hands on experience in manufacturing and various industrial processes, and demonstration/training on various technologies for income generation.

Scale Up Production Facilities

Production facilities on a scaled up level for various technologies or processes are also available to industry such as those on: coconut oil milling and refining, food processing line (canning & dehydration), and materials processing (ceramics, plastics).

Technical Information and Promotion

Documentation and dissemination of information on S&T services, technologies and other technical inquiry data and promotion assistance to clients in various media channels.

FRONTLINE SERVICES: **TECHNOLOGICAL SERVICES DIVISION**

FACILITATING REQUEST FOR TECHNICAL INQUIRIES/ASSISTANCE

CLIENT(S): General Public (Private / government offices/ schools/Organizations, industry/ NGOs, LGUs, academe, industry/ students, housewives)

FRONTLINE SERVICE	REQUIREMENTS	PROCEDURES	RESPONSIBLE PERSON	TIME
1. Facilitating Request for Technical Inquiries/Assistance	▪ Office Transaction Schedule: Monday to Friday 8:00 AM to 12:00 PM 12:00 PM – 5:00 PM ▪ Relevant information materials on ITDI technologies and services (i.e., brochures, flyers etc.) ▪ Technical Service Form ▪ Customer Satisfaction Survey Form (QMS-F2) ▪ Telephone/Fax machine	**A. Walk-in Clients** A.1 Determine information or assistance needed based on discussion with client(s). A.2 Discuss/provide the client(s) relevant information. Or provide the client with the list of info materials (i.e. brochures, flyers, hand-outs) that could be acquired. Issue the client an Order of Payment Slip for info materials acquired. The Order of Payment Slip could serve as the official receipt. A.3 Refer the client(s) to concerned division/ technical expert in cases that will require in-depth discussion on technical inquiries/ assistance / services or to Training /Regional Coordinator for request for training/ techno transfer related activities. A.4 Request client to fill up Technical Service Form(s) ____ for activities related to training, technology transfer, technical assistance or services for approval of chief of concerned division. A.5 Advise client on the time frame/details of follow through activities i.e., preparation of Conforme Letter/ MOA, payment of fees/charges for services. A.6 Request the client to fill-up QMS-F2 before leaving the office. A.7 Forward the TS Form to concerned division for action/ approval of Division Chief.	Information Officer Mr. Alvin Arante / Ms. Josefina King Information Officer Division Chief/ Resource Person Information Officer/ Training Coordinator Information Officer/Training Coordinator Information Officer / Training Coordinator Information Officer / Training Coordinator	10-15 mins. 15-30 mins 5 minutes 10 minutes 5 minutes 5 minutes Within the day

FACILITATING REQUEST FOR TECHNICAL INQUIRIES/ASSISTANCE

FRONTLINE	REQUIREMENTS	PROCEDURES	RESPONSIBLE PERSON	TIME
		A.8 Prepare MOA/CL for clearance of concerned Division Chief and approval of ITDI Director.	Training Coordinator/ Concerned Division.	Within 5 days upon approval of TS Form
		A.9 Finalize CL/MOA for training and other technical Services	Training/Regional Coordinator	Within the day upon clearance of concerned division
		A.10 Forward MOA to the Office of the Director for approval/signing.	Liason Officer of concerned division	Within the day upon receipt of document.
		A.11 Send CL/MOA to client for signing (through Fax and mail).	Training or Regional Coordinator/ Record Section	1 day after the approval/signing of the Director.
		B. Telephone Inquiries/Requests		
		B.1 Determine information or assistance needed based on phone-in discussion with client.	Information Officer/Divisional Staff	10 minutes
		B.2 Provide relevant information to phone-in clients . Or get e-mail /mailing address of client to be able to send information materials needed.	Information Officer/Divisional Staff	10 – 15 minutes
		B.3 Transfer call to local line and refer client to concerned division/ resource person (if inquiry requires a more detailed discussion).	Information Officer/Divisional Staff/ Training or Regional Coordinator	5 minutes
		B.4 For training/technical services, determine the extent of request and advise client to write a letter/e-mail details of request for action. If training could be accommodated on regular schedule, get full name and contact numbers and address of client and record in the logbook .	-do-	10 – 15 minutes
		B.5 Advise client on the details on the processing of request for training/technical services.	-do-	10 minutes

STANDARDS AND TESTING DIVISION

RENDERING TESTING SERVICES

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
Rendering testing services	company/ institution/ individual	Validation of technical service request	Laboratory Head/ designated validator	30 mins	Details or particulars of the requested technical service/s (i.e. name, address, contact number of customer; identification, condition of the sample; test to be conducted)
		Assignment of test to analyst	Laboratory /Section Head	15 mins	TACIS TSR (Technical Service Request) Form; workload of laboratory analysts
		Conduct of test	Analyst	Varies according to test method	Work Order Form QR 4.4.2.1(for analyst's reference), competent staff, appropriate environmental conditions, sampling plan; facilities/equipment satisfying test requirements, validated test method/s
		Computation/evaluation of test data	Analyst	Varies according to test method	worksheet/record of raw test data; data processor; relevant Technical Procedure
		Preparation of Work Order Report	Analyst	within the day	Work Order Form; worksheet/s and computations

STANDARDS AND TESTING DIVISION

RENDERING TESTING SERVICES

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
		Review of Work Order Report	Laboratory Head & Section Head	within the day	TACIS TSR Form; signature of analyst/Section Head; Work Order Form; worksheet/s and computations
		Print Test Report	RRU Staff	within the day	TACIS TSR Form; Work Order Report with name and signature each of analyst, Section Head, and Laboratory Head
		Final/Presentation Review of Test Report	Division Chief & Laboratory Head	within the day	TACIS TSR Form; Test Report
		Signing of Test Report	Division Chief & Laboratory Head	within the day	TACIS TSR Form; Test Report
		Releasing of Test Report	RRU Staff	15 mins	TACIS TSR Form; Test Report with signature each of analyst, Section Head, Laboratory Head and Division Chief; customer's copy of TACIS TSR Form
		Report Filing & Management	RRU Staff	15 mins	STD's copy of Test Report, TACIS TSR Form, STD's database of customers' requests/services

STANDARDS AND TESTING DIVISION

SCHEDULE OF FEES AND CHARGES FOR TESTING AND ANALYTICAL SERVICES

CHEMISTRY LABORATORY
ORGANIC CHEMISTRY SECTION

SAMPLE NAME	TEST NAME	TEST METHOD	TEST FEE (PhP)	SAMPLE REQUIREMENT
FUELS AND PETROLUEM PRODUCTS				
Liquid Fuels/ Lubricants	API Gravity/Specific Gravity/ Density	ASTM D4052/ASTM D1298	700.00	500mL
	Ash, straight	ASTM D 482	600.00	100mL
	Ash, Sulfated	ASTM D 874	840.00	100mL
	Color	ASTM D1500	360.00	100mL
	Copper Corrosion test	ASTM D130	700.00	100mL
	Flashpoint			
	Cleveland Open Cup (COC)	ASTM D 92	1,000.00	500mL
	Penky Martens Closed Cup (PMCC)	ASTM D 93	1,000.00	500mL
	Tag Closed Tester (TCT)	ASTM D 56	1,000.00	500mL
	Kinematic viscosity	ASTM D 445	600.00	200mL
	Total Acid Number	ASTM D 974	480.00	200mL
	Viscosity index	ASTM D 2270	1,200.00	200mL
	Water & sediments	ASTM D 1796/ASTM D2709	840.00	1L
	Water content	ASTM D 95	840.00	1L
	Compatibility Test	ASTM D 4740	1,300.00	500mL

	Sulfur	Combustion	1,400.00 1st spl, 900.00 next	100mL
	CHN	Combustion	2,800.00 1st spl, 1,500.00 next	100mL
	Heating value	ASTM D240	1,500.00	100mL
	Pour Point	ASTM D97	1,500.00	200mL
Solid Fuels (charcoal,wood biomass)	Proximate Analysis	ASTM D 1762	1,800.00	100g finely ground
	Ash	ASTM D 1762	840.00	
	Moisture	ASTM D 1762	360.00	
	Volatile Combustible Matter	ASTM D 1762	600.00	
	Fixed Carbon (by difference)	ASTM D 1762	1,800.00	
	Heating value	ASTM D 3286	1,500.00	
	Sulfur	ASTM D 4239	1,400.00 1st spl 900.00 next	
	Ultimate analysis	ASTM D 5373	2,800.00 1st spl, 1,500.00 next	
Anthracite Coals	Acid solubility	ANSI/AWWA B100-96	1,500.00	1000 g granules
	Hardness, Mohs' scale		300.00	100 g blocks
Grease	Dropping Point	ASTM D 566	600.00	100 g
	Penetration Worked	ASTM D 217	800.00	500g

Brake Fluid	Dry ERBP Loss on Evaporation pH Specific Gravity Kinematic viscosity @ 100 ℃	PNS 239 PNS 239 PNS 239 ASTM D 1298 ASTM D 445	480.00 2,200.00 360.00 700.00 600.00	1L
Waxes	Drop Melting Point Penetration, Needle	ASTM D 127 ASTM D 1321	720.00 720.00	100g 200 g
Asphalt	Penetration, Needle Softening point	ASTM D 5 ASTM D 36	720.00 720.00	200 g 50 g
PLANTS AND PHARMACUETICAL PRODUCTS				
Proximate Composition of Plant & Plant Products and Herbal Food Supplements	Acid insoluble ash	USP 23, [561]	1,080.00	20 g
	Crude Fat Crude Fiber Crude Protein Essential Oil content Fixed Oil content Moisture Total Ash	AOAC 920.39 USP 23, [561] AOAC 955.04 USP 23, [561] USP 23, [401] USP 23, [921] USP 23, [561]	840.00 1,440.00 960.00 1,080.00 840.00 600.00 720.00	20g 20 g 20 g 500g per set up 500g 20 g 20 g
Plant Components	Phytochemical (alkloids, flavonoids, glycosides saponins, sterols, tannins,triterpenes	BTD Manual Qualitative	600.00	300 g
	Alkaloids Flavonoids Glycosides	TLC TLC TLC	1,200.00 1,200.00 1,200.00	300 g 300 g 300 g

	Hydrogen Cyanide	BTD Manual Qualitative	600.00	300 g
	Sterols	TLC	1,200.00	300 g
	Sugar (Glucose, Fructose, Sucrose)	HPLC	1.920.00 any 1st analyte add'l analyte 480.00 each	100 – 150g dried or fresh spl
	Triterpenes	TLC	1,200.00	5-10g extract 50g dried part
Plant Oils (Essential & Fixed Oil) Plant Extracts	Iodine value	USP [401]	840.00	10g
	Refractive Index	USP [831]	240.00	5 mL
	Saponification Value	USP [401]	840.00	20 g
	Acid Value	Titration	600.00	100 mL
	Specific Gravity	USP [841]	480.00	100 mL
	Total Essential oil Content	AOAC 932.11	1,080.00	300 mL
	Total Fixed Oil Content	USP [401}	840.00	250 g
	Viscosity (Brookfield)	ASTM D 2556	840.00	500 mL
	Scavenging activity of plant extracts	Spectrophotometer	1,800.00	200 g
	Antioxidant activity of plant extracts	Spectrophotometer	1,440.00	200 g
	Carvacrol	GC	1,800.00 any 1st analyte add'l. Analyte 600.00 each	5mL
	Citral	GC		5mL

	Citronellal	GC		5mL
	Citronellol	GC		5mL
	Eucalyptol/Cineole	GC		5mL
	Eugenol	GC		5mL
	Geraniol	GC		5mL
	Limonene	GC		5mL
	Linalool	GC		5mL
	Myrcene	GC		5mL
	ą-Pinene	GC		5mL
	ß-Pinene	GC		5mL
	Terpineol	GC		5mL
Alkaloids	Caffeine	HPLC	2,400.00	100 g
Tannins	Catechol	TLC	1,200.00	100 g
	Pyrogallol	TLC	1,200.00	100 g
Liquid Nutritional Supplement	Calcium	AOAC 929.07	1,920.00	1L
	Phosphorous	AOAC 930.35	1,440.00	500 mL
	Sodium	AOAC 966.16	1,920.00	1L
Plant Products & Herbal Supplements	ß-Carotene	HPLC	3,600.00	100 g
	Vitamin A	HPLC	3,600.00	100 g
	Vitamin B1	HPLC	3,000.00	100 g
	Vitamin B2	HPLC	3,000.00	100 g
	Vitamin B6	HPLC	3,000.00	100 g
	Vitamin E	HPLC	3,600.00	100 g
Pharmaceutical Preparations	Amoxicillin	USP 23	3,600.00	compacted/powder: 50g

	Ampicillin	USP 23	3,600.00	capsule/tablet : 100 pcs or 50 g
	Cephalexin	USP 23	3,600.00	
	Guaiafenesin	USP 23	3,600.00	Injectables : 10 vials or ampoules in orig pack
	Minoxidil	USP 23	3,840.00	
	Nifedipine	USP 23	3,000.00	Powder for oral syrup/ suspension/ liquid: suspension/ liquid:4 bots in orig. pack
	Paracetamol (Acetaminophen)	USP 23	2,400.00	
	Rifamycin	USP 23	3,600.00	
Topical Preparations, Liniments, Ointments	Camphor	GC	1,800.00 any 1st analyte 600.00 per add'l analyte	60 – 100mL
	Menthol	GC		
	Eucalyptol/Cineole	GC		
	Methyl Salicylate	GC		
Medicated Cosmetic Soaps	Camphor	GC	1,800.00	60 – 100mL
	Menthol	GC	1,800.00	
Medicated Cosmetic Liquid Preparations	Hydroquinone	HPLC	1,800.00	4 bots in orig. pack
	Retinoic Acid (Tretinoin)		3,600.00	

	Ethanol / 2-Propanol	GC	1,800.00 any 1st analyte 600.00 per add'l analyte	250 mL
Drug, Pharmaceuticals and Cosmetic Preparations	pH	USP 23	360.00	100 mL
	Viscosity (Brookfield)	ASTM D 2556	840.00	500 mL
	Moisture	USP 23	600.00	100 g
PAINTS AND ALLIED PRODUCTS				
Water-based Paints, Latex, White; Elastomeric; Acrylic Polymer, Copolymer	Chemical resistance	ASTM D 1308		At least 4L sample
	Spot Test		360.00	Test panels
	Immersion Test		600.00	
	Density	ASTM D 1475	480.00	
	Dry/Cure time	ASTM D 1640	360.00	
	Fineness of Grind	ASTM D 1210	360.00	
	Gloss Measurement	ASTM D 523	360.00	
	Pigment and Vehicle content	ASTM D 2371	1,440.00	
	Titanium Dioxide	ASTM D 1394	1,200.00	
	If requested alone		1,920.00	
	Total Solids, % weight	ASTM D 2369	480.00	
	Viscosity (KU)	ASTM D562	480.00	

	Volume non-volatile matter	ASTM D2697	840.00	
	If requested alone		1,800.00	
	Water resistance	ASTM D870	360.00	
Organic solvent-based Paints, Enamel, White; Polyurethane	Adhesion	ASTM D 3359	360.00	At least 4L sample
	Density	ASTM D 1475	480.00	Test panels
	Dry/Cure time	ASTM D 1640	360.00	
	Fineness of Grind	ASTM D 1210	360.00	
	Flexibility	ASTM D 522	360.00	
	Gloss Measurement	ASTM D 523	360.00	
	Hardness	ASTM D 3363	360.00	
	Pigment and Vehicle content	ASTM D 2371	1,440.00	
	Titanium Dioxide	ASTM D 1394	1,200.00	
	If requested alone		1,920.00	
	Total Solids, % weight	ASTM D 2369	480.00	
	Viscosity (KU)	ASTM D 562	480.00	
	Volume non-volatile matter	ASTM D 2697		
	or Total Solids, % volume		840.00	
	If requested alone		1,800.00	
Primer Paints: Zn Yellow, Red Lead, Ferrous Oxide	Adhesion	ASTM D 3359	360.00	At least 4L sample
	Density	ASTM D 1475	480.00	Test panels
	Dry/Cure time	ASTM D 1640	360.00	
	Fineness of Grind	ASTM D 1210	360.00	
	Flexibility	ASTM D 522	360.00	
	Gloss Measurement	ASTM D 523	360.00	

	Hardness	ASTM D 3363	360.00	
	Iron Oxide (Iron Oxide Primer)	ASTM D 50	1,200.00	
	If requested alone		1,920.00	
	Pigment and Vehicle content	ASTM D 2371	1,440.00	
	Red Lead (Red Lead Primer)	ASTM D28	1,200.00	
	If requested alone		1,920.00	
	Total Solids, % weight	ASTM D 2369	480.00	
	Viscosity (KU)	ASTM D 562	480.00	
	Volume non-volatile matter	ASTM D 2697		
	or Total Solids, % volume		840.00	
	If requested alone		1,800.00	
	Chromium (Zn Yellow Primer)	ASTM D 444	1,200.00	
	If requested alone		1,920.00	
	Zinc (Zn Yellow Primer)	ASTM D 444	1,200.00	
	If requested alone		1,920.00	
Reflectorized Traffic Marking Paints: White and Yellow	Density	ASTM D 1475	480.00	At least 4L sample
	Dry/Cure time/No-Pick-Up time	ASTM D 1640/D711	360.00	Test panels
	Glassbeads			
	Content	JIS K5665	600.00	
	Density	JIS R3301	600.00	
	Gradation	ASTM D1214	1,200.00	
	Lead, Total (for yellow paint)	ASTM D126	1,200.00	
	If requested alone		1,920.00	
	Pigment & Vehicle Content	ASTM D237/D4451	1,440.00	
	Titanium Dioxide (for white paint	ASTM D1394	1,200.00	
	If requested alone		1,920.00	

	Total Solids, % weight	ASTM D2369	480.00	
	Water resistance	ASTM D870	360.00	
Thermoplastic Powder Paints White and Yellow	Calcium Carbonate	ASTM C25	1,080.00	At least 1kg sample
	If requested alone		1,560.00	
	Dry/Cure time	ASTM D1640	360.00	
	Glassbeads			
	Content	JIS K5665	600.00	
	Density	JIS R3301	600.00	
	Gradation	ASTM D1214	1,200.00	
	Lead, Total (for yellow paint)	ASTM D126	1,200.00	
	If requested alone		1,920.00	
	Pigment	ASTM D4451	840.00	
	Softening Point	ASTM E28	840.00	
	Titanium Dioxide (for white paint)	ASTM D1394	1,200.00	
	If requested alone		1,920.00	
	Chrome Yellow (for yellow paint)	ASTM D1394	1,200.00	
	If requested alone		1,920.00	
Aluminum Paints	Density	ASTM D1475	480.00	At least 4L sample
	Dry/Cure time	ASTM D1640	360.00	Test panels
	Pigment and Vehicle content	ASTM D2371	1,440.00	
	Viscosity (Ford Cup #4)	ASTM D1200	480.00	
	Volatile and nonvolatile Matter	ASTM D2369	600.00	
	Water content	ASTM D95	600.00	
	Adhesion	ASTM D3359	360.00	
	Chemical resistance	ASTM D1308		
	Spot Test		360.00	
	Immersion Test		600.00	

	Additional substrate		120.00	
	Heat resistance	ASTM D2485	3,000.00	
	Total Solids, % weight	ASTM D2369	480.00	
	Total Solids, % volume	ASTM D2697	840.00	
	If requested alone		1,800.00	
Avion Blue Enamel Paint	Adhesion	ASTM D3359	360.00	At least 4L sample
	Chemical resistance	ASTM D1308		Test panels
	Spot Test		360.00	
	Immersion Test		600.00	
	Additional substrate		120.00	
	Density	ASTM D1475	480.00	
	Dry/Cure time	ASTM D1640	360.00	
	Fineness of Grind	ASTM D1210	360.00	
	Flexibility	ASTM D522	360.00	
	Hardness	ASTM D3363	360.00	
	Total Solids, % weight	ASTM D2369	480.00	
	Viscosity (Ford Cup #4)	ASTM D1200	480.00	
	Water resistance	ASTM D870	360.00	
Epoxy Paints	Adhesion	ASTM D3359	360.00	At least 4L sample
	Chemical resistance	ASTM D1308		Test panels
	Spot Test		360.00	
	Immersion Test		600.00	
	Additional substrate		120.00	
	Density	ASTM D1475	480.00	
	Dry/Cure time	ASTM D1640	360.00	
	Flexibility	ASTM D522	360.00	
	Hardness	ASTM D3363	360.00	
	Total Solids, % weight	ASTM D2369	480.00	

	Total Solids, % volume	ASTM D2697	840.00	
	If requested alone		1,800.00	
	Viscosity (KU)	ASTM D562	480.00	
	Water resistance	ASTM D870	360.00	
Adhesives	Viscosity, Krebs Unit	ASTM D1084	480.00	At least 1L/analyte
	Total Solids (non volatile content)	ASTM D4426	480.00	
	Viscosity (Brookfield)	ASTM D1084	840.00	
Glue	pH	PNS 1800:2000	360.00	At least 1L/analyte
	Free formaldehyde		600.00	
	Solid Content		600.00	
Physical analysis of Fingerprint Taker	Thumbprint Impressions, plain	Sirchie Fingerprint Method	960.00	at least 10 pcs.
Indelible Ink	Silver Nitrate, % w/w	ISTD (Gravimetry/ Titrimetry)	1,920.00	at least 150 mL
FOOD AND FEEDS				
Foods/Feeds	Protein	Block Digestion Method	960.00	200 mL or 200 g
	Ash	AOAC	540.00	200 g
	Ash-Acid insoluble	Gravimetric	900.00	200 g
	Ash-Water soluble & insoluble	Gravimetric	1,020.00	200 g
	Ash-Alkalinity	Gravimetric	1,020.00	200 g
	Ash-Alkalinity of Water, Insoluble	Gravimetric	1,440.00	200 g
	Ash-Alkalinity of Water Soluble	Gravimetric	1,320.00	200 g
	Ash-Sulphated	Gravimetric	900.00	200 g
	Crude Fiber	Gravimetric	1,380.00	200 g
	Moisture	Gravimetric	360.00	200 g
	Crude Fat	Acid hydrolysis	1,080.00	200 g
	Starch	Direct acid hydrolysis	1,200.00	200 g

	Food Energy (Calories)	By computation	2,940.00	500 g
	Total carbohydrate	By difference	2,940.00	500 g
	Total Dietary Fiber	AOAC	7,200.00	300 g
	pH	AOAC	300.00	200 g
	Cholesterol	HPLC	3,960.00	300 g
	Caffeine	HPLC	2,400.00	300 g
	Sorbic Acid	HPLC	3,960.00	300 g
	Squalene in fish oil	HPLC	6,000.00	200 g
	Benzoic Acid	HPLC	3,960.00	300 g
	Nitrite in meat	AOAC	1,440.00	400 g
	Calcium	AOAC	1,920.00	1L
	Iron	AOAC	1,920.00	500 mL
	Magnesium	AOAC	1,920.00	1L
	Manganese	AOAC	1,920.00	1L
	Potassium	AOAC	1,920.00	1L
	Sodium	AOAC	1,920.00	1L
	Zinc	AOAC	1,920.00	500 mL
	Lead	AOAC	1,920.00	500 mL
	Cadmium	AOAC	1,920.00	500 mL
	Mercury	Cold Vapor AAS	1,920.00	500 mL
	Copper	AOAC	1,920.00	500 mL
	Phosphorous	AOAC	1,920.00	500 mL
	Arsenic	AOAC	1,920.00	500 mL
	Acidity (Titratable) in fruit/ veg. product	AOAC	540.00	300 mL
	Acidity (Volatile) in fruit/ veg. product	AOAC	480.00	300 mL
	Solids (Soluble) in fruit/ veg. Product	AOAC	480.00	200 mL
	Solids (Water-insoluble) in fruit/ veg. Product	AOAC	360.00	200 mL
	Sodium Chloride	AOAC	600.00	200 g

	Solids (Total)	AOAC	360.00	200 g
Sugar and sugar products	Total Reducing Sugar	AOAC	1,080.00	200 g
	Free Reducing Sugar	AOAC	840.00	200 g
	Density	AOAC	480.00	200 g
	Specific Gravity	AOAC	480.00	200 g
	Total Solids (% in syrup)	AOAC	480.00	100 g
	Lactose Purity	HPLC	2,400.00	100 g
	Fructose Purity	HPLC	2,400.00	100 g
	Glucose Purity	HPLC	2,400.00	100 g
	Sucrose Purity	HPLC	2,400.00	100 g
	Sucrose	AOAC	1,800.00	200 g
	Aspartame (Beverage)	HPLC	2,400.00	200 g
	Lactose in milk	HPLC	2,400.00	200 g
	Glycerol	HPLC	2,400.00	200 g
Vinegar	Acid (as Acetic Acid), Total	AOAC 930.35	540.00	200 mL/ analyte
	Alcohol	AOAC 930.35	600.00	
	Alkalinity of soluble ash	AOAC 900.02	1,320.00	
	Ash	AOAC 930.35	540.00	
	Nonvolatile acids	AOAC 930.35	600.00	
	Nonvolatile reducing substances	AOAC 930.35	1,200.00	
	Permanganate Oxidation Number	AOAC 944.10	1,200.00	
	Total Solids	AOAC 930.35	360.00	
	Total soluble solids	AOAC 930.35	480.00	
	Volatile Acids	AOAC 930.35	480.00	
	If requested alone		1,140.00	
Fats and Oils	Specific Gravity	AOAC 985.19	480.00	200 mL/analyte
	Fatty Acid Profile	GC	2,400.00	
	(For solid food, additional fee for		1,080.00	

	extraction)			
	Free Fatty Acid/Acid No.	AOAC 940.28	480.00	
	Index of Refraction	AOAC 921.08	360.00	
	Iodine Absorption Number	AOAC 920.158/159	600.00	
	Melting Point of Fat/Fatty Acid	AOAC 920.157	480.00	
	Moisture/Volatile Matter	AOAC 962.12	360.00	
	Peroxide Value	AOAC 965.33	600.00	
	Saponification Value	AOAC 920.160	720.00	
	Specific Gravity	AOAC 920.212	480.00	
	Unsaponifiable Matter	AOAC 033.08	1,320.00	
	Viscosity (Brookfield)	ASTM D 2564/1084	840.00	1L
	Viscosity (Cannon-Fenske)	ASTM D445	600.00	200 mL/ analyte
Vitamins in Food/Feeds	Vitamin A (Retinol)	HPLC	3,600.00	300 g/analyte
	Total Vitamin A (Retinol + ß-carotene)	HPLC	6,000.00	
	ß-carotene	HPLC	3,600.00	
	Vitamin E	HPLC	3,960.00	
	Niacinamide in juice	HPLC	3,000.00	
	Vitamin B1	HPLC	3,000.00	
	Vitamin B2	HPLC	3,000.00	
	Vitamin B6	HPLC	3,000.00	
	Vitamin C	HPLC	2,400.00	
Distilled Liquors/Wines/Beer	Acids	AOAC		1L
	Total Acids		540.00	
	Fixed Acids		600.00	
	Volatile acids (If requested alone)		1,140.00	
	Alcohol	GC	1,800.00	1L
	Ash	AOAC	540.00	500 mL

	Ethanol/Methanol	GC	1,800.00 1st analyte +600.00 add'l analyte	1L
	Fusel Oil	GC	1,800.00	1L
	Higher Alcohol & Ethly Acetate	AOAC	1,800.00 1st analyte +600.00 add'l analyte	1L
	Specific Gravity	AOAC	480.00	500 mL
	Total Aldehydes	AOAC	600.00	1L
	Total Acidity (for wines as Tartaric, Malic or Citric)	AOAC	540.00	500 mL
Ethyl Alcohol	Acetone	GC	1,800.00	200 mL
	Benzene	GC	840.00	200 mL
	Purity	GC	1,800.00	200 mL
	Fusel Oil & Amyl Alcohol	GC	1,800.00	200 mL
Organic Solvent and Chemicals	Density	ASTM	480.00	200 mL
	Acidity	ASTM D1613	840.00	200 mL
	Water Miscibility	ASTM D1722	480.00	200 mL
	pH	ASTM E 70	360.00	200 mL
	Purity	GC	1,800.00	200 mL
	Residue on Evaporation	ASTM D 1353	720.00	200 mL
	Refractive Index	Refractometric Method	360.00	200 mL
	Viscosity (Brookfield)	ASTM	840.00	500 mL
	Flash Point, TCT	ASTM	1,000.00	300 mL
Disinfectant	Benzalkonium Chloride content	USP	1,200.00	200 mL

	Viscosity (Brookfield) pH	ASTM ASTM E 70	840.00 360.00	1L 200 mL
Toilet Soap/Laundry Soap	Moisture & Volatile Matter	PNS	720.00	200 g
	Total Matter Insoluble (alcohol+NaCl) Free Alkali (as NaOH or Na2O) Matter insoluble in Water If requested alone Anhydrous soap	PNS PNS PNS PNS PNS	1,320.00 720.00 360.00 1,080.00 1,440.00	200 g 200 g 200 g 200 g 200 g
Other Test	FTRI Scan	FTIR	590.00	

CHEMISTRY LABORATORY
INORGANIC CHEMISTRY SECTION

SAMPLE NAME	TEST NAME	TEST METHOD	TEST FEE (PhP)	SAMPLE REQUIREMENT
Water (Deepwell, Spring, Distilled, Deionized, Bottle) and Wastewater (Effluent, Influent)	Aluminum	GF-AAS	1,500.00	Not less than 6L
	Aluminum Ammonium	Colorimetry Colorimetry	700.00 700.00	

	Arsenic	Mercuric Bromide Stain	500.00	
	Arsenic	HVG-AAS	1,500.00	
	Anions (F, Cl, NO2, Br, NO3, PO4, SO4)	IC	800.00 (1st analyte)	
	Succeeding ions		400.00	
	Cadmium	AAS	800.00	
	Cadmium	GF-AAS	1,500.00	
	Cadmium	Colorimetry	700.00	
	Calcium	AAS	800.00	
	Calcium	EDTA Titration	550.00	
	Calcium	Colorimetry	700.00	
	Chloride	Argentometric titration	700.00	
	Chlorine, Free	Colorimetry	700.00	
	Chlorine (Residual)	Iodometric	550.00	
	Chromium	AAS	800.00	
	Chromium	GF-AAS	1,500.00	
	Chromium hexavalent	Colorimetry	700.00	
	Color	Colorimetry(SQ 118)	275.00	
	Color	Platinum Standard	700.00	
	Conductivity	Electrical Conductivity Method	350.00	
	Copper	AAS	800.00	
	Copper	GF-AAS	1,500.00	
	Cyanide, Free	Colorimetry	700.00	
	Fluoride	Colorimetry	700.00	
	Formaldehyde	Colorimetry	700.00	

	Hydrazine	Colorimetry	700.00	
	Iron	AAS	800.00	
	Iron	GF-AAS	1,500.00	
	Iron	Colorimetry	700.00	
	Lead	AAS	800.00	
	Lead	GF-AAS	1,500.00	
	Lead	Colorimetry	700.00	
	Magnesium	AAS	800.00	
	Magnesium	EDTA-By difference	550.00	
	Manganese	AAS	800.00	
	Manganese	GF-AAS	1,500.00	
	Mercury	Cold Vapor AAS	1,500.00	
	Nickel	AAS	800.00	
	Nickel	GF-AAS	1,500.00	
	Nitrate	Colorimetry	700.00	
	Nitrite	Colorimetry	700.00	
	Nitrogen, Total	Colorimetry	700.00	
	Nitrogen (Ammonia-Nitrogen)	Distillation/Titration	850.00	
	pH	pH Potentionetry	200.00	
	Phenol	Colorimetry	700.00	
	Phosphorus	Colorimetry	700.00	
	Potassium	AAS/Flame Emission	800.00	
	Potassium	Colorimetry	700.00	
	Silica	Gravimetry	570.00	
	Silicon	Colorimetry	700.00	
	Silver	AAS	800.00	
	Sodium	AAS/Flame Emission	800.00	
	Sulfate	Colorimetry	700.00	
	Surfactant (anionic)	Colorimetry SQ	700.00	

	Total Acidity as CO2	Titrimetry	550.00	
	Total Alkalinity as CaCO3	Titrimetry	550.00	
	Total Hardness	EDTA Titration	550.00	
	Total Dissolved Solids	Gravimetry	550.00	
	Total Solids	Gravimetry	550.00	
	Turbidity	Turbidimetry	270.00	
	Zinc	GF-AAS	1,500.00	
	Zinc	AAS	800.00	
(Wastewater)	COD	Closed Reflux	700.00	
	Total Suspended Solids	Gravimetry	550.00	
	Settleable Solids	Imhoff	550.00	
	Oil & Grease	Pet. Ether Extraction/Gravimetric	1,000.00	
Fertilizers and Related Materials Organic Fertilizer	Micronutrient (Calcium/Copper/ Chromium/Iron/ Magnesium/Manganese/Nickel/ Zinc)	AAS	850.00 per element	For solid sample – at least 200g For liquid sample – at least 200mL
	Moisture	AOAC	600.00	
	Phosphorous, Available	AOAC	850.00	
	Phosphorous, Total	AOAC	850.00	
	Phosphorous, Citrate Soluble	AOAC	850.00	
	Phosphorous, Water Soluble	AOAC	850.00	
	Potash (K2O)	AAS	850.00	
	N,P,K		850.00 per element	
Soil, Sediments, Sludge	Arsenic	Mercuric Bromide	800.00	at least 250g
	Arsenic	HVG AAS	1,500.00	

	Cadmium/Calcium/Chromium/Copper/Gold/Iron/Lead/Magnesium/ Manganese/Zinc	AAS	850.00 per element	
Clay and Related Materials, Pozzalan Cement/Perlite/ Zeolite/Refractories/ Fly Ash Sand/Silica Sand (99.9 % SiO2) Diatomaceous Earth (77% SiO2) Rice Hull (90% SiO2) Ceramics/Glass Borosilicate glass	Complete Chemical Analysis (SiO2, Fe2O3, Al2O3, TiO2, CaO, MgO, Na2O, K2O, LOI)	JISM 5584	5,500.00	at least 250g
	Alumina	JISM 5584	1,350.00	
	Calcium Oxide	JISM 5584	880.00	
	Iron Oxide	JISM 5584	850.00	
	Loss on Ignition	JISM 5584	550.00	
	Magnesium Oxide	JISM 5584	1,330.00	
	Moisture	JISM 5584	550.00	
	Potassium Oxide	JISM 5584	700.00	
	Silica	JISM 5584	1,070.00	
	Sodium Oxide	JISM 5584	700.00	
	Titania	JISM 5584	930.00	
	Manganese Oxide	AAS	800.00	
	Boron Oxide	Titrimetry ASTM 169-	1,500.00	

	Extractable Chloride	92 Titrimetry(Argentometric)	720.00	
	-do-	IC	800.00	
Cement (Hydraulic, Portland) Aggregates	Complete Chemical Analysis (SiO2, Fe2O3, Al2O3, TiO2, CaO, MgO, SO3, LOI, Insoluble Residue)	ASTM C114	4,800.00	at least 250g
	Alumina	ASTM C114	850.00	
	Silica	ASTM C114	600.00	
	Calcium Oxide	ASTM C114	700.00	
	Insoluble Residue	ASTM C114	500.00	
	Iron Oxide	ASTM C114	850.00	
	Loss on Ignition	ASTM C114	550.00	
	Magnesium Oxide	ASTM C114	1,100.00	
	Potassium Oxide	ASTM C114	700.00	
	Sodium Oxide	ASTM C114	700.00	
	Sulfate/Sulfur Trioxide	ASTM C114	930.00	
	Titania	ASTM C114	700.00	
Limestone (CaCO3), Quicklime (CaO), Hydrated Lime (Ca(OH)2), Scales, etc. Calcite -CaCO3 Lime – CaO (apog)	Complete Chemical Analysis (SiO2, Fe2O3, Al2O3, CaO, MgO, LOI	ASTM C25	3,500.00	at least 250g
	Alumina	ASTM C25	1,310.00	

	Available Lime Index	ASTM C25	500.00	
	Calcium Oxide	ASTM C25	700.00	
	Iron Oxide	ASTM C25	800.00	
	Loss on Ignition	ASTM C25	550.00	
	Magnesium Oxide	ASTM C25	1,100.00	
	Moisture	ASTM C25	550.00	
	Potassium Oxide	ASTM C25	700.00	
	Sodium Oxide	ASTM C25	700.00	
	Silica	ASTM C25	1,320.00	
	Phosphorous Pentoxide, (P2O3)	ASTM C25	1,310.00	
Powder Granules	Bulk/Packed Density	ASTM C110	450.00	at least 500g
	pH	pH Potentiometry	300.00	
	Sieve Analysis (one mesh)	ASTM C110	400.00	
	Sieve Analysis (succeeding mesh)	ASTM C110	230.00	
Gypsum (CaSO4.2H2O) and Gypsum Products,	Complete Chemical Analysis (CaSO4.2H2O, CaSO4, SIO2 and Insoluble, R2O3, CaO, MgO, SO3)	ASTM C471	4,500.00	at least 250g
	Aluminum Oxide	ASTM C471	805.00	
	Anhydrite (CaSO4)	ASTM C471	800.00	
	Calcium Oxide	ASTM C471	700.00	
	Combined Water	ASTM C471	750.00	
	Free Water	ASTM C471	500.00	
	Iron and Aluminum Oxides (mixed oxides)	ASTM C471	700.00	
	Iron Oxide	ASTM C471	805.00	
	Magnesium Oxide	ASTM C471	1,100.00	
	Purity as CaSO4.2H2O	ASTM C471	800.00	

	Silica and Insoluble Matter	ASTM C471	800.00	
	Sodium Chloride	ASTM C471	500.00	
	Sulfate/Sulfur Trioxide	ASTM C471	930.00	
Salt/Sodium Chloride	Complete Chemical Analysis (NaCl. Moisture,, Water Insolubles, Ca, Mg, SO4)	AOAC 925.55	3,700.00	at least 250g 1 kg sample for CCA
	Acid Insolubles	AOAC 925.55	550.00	
	Calcium	ASTM E534	700.00	
	Iodine (as received)	AOAC 925.56	590.00	
	Iodine (dry basis)	AOAC 925.56	750.00	
	Magnesium	ASTM E534	800.00	
	Moisture	AOAC 925.55	600.00	
	Assay, NaCl (as received)	Argentimetric Titration	590.00	
	Assay, NaCl (dry basis)	Argentimetric Titration	750.00	
	Sulfate	AOAC 925.55	550.00	
	Water Insolubles	AOAC 925.55	500.00	

Chemical/Reagents KOH – Caustic potash NaOH – Caustic Soda NaHCO3 – Baking Soda NaHCO3 – tartaric acid + baking powder Na2CO3 – Soda ash	Arsenic	Mercuric Bromide Stain	800.00	For powder sample – 100g For liquid sample – 100mL
	Arsenic	HVG-AAS	1,500.00	
	Assay	Gravimetric	590.00	
	Assay	Titrimetry	590.00	
	Assay	Electrometric Titration	590.00	
	Assay (NH3)	AOAC 939.02	570.00	
	Chloride	Turbidimetric	570.00	
	Heavy Metals as Pb	Colorimetry	800.00	
	Insoluble Residue	Gravimetric	570.00	
	Iron	Colorimetry	700.00	
	pH (liquid)	ASTM E70	300.00	
	Specific Gravity, Hydrometer	ASTM D891	230.00	

	Specific Gravity, Pycnometer Sulfate Trace Metals	ASTM D891 Turbidimetry AAS (Std addition)	350.00 700.00 800.00 per element	
Bleaching Powder/ Solution, Detergents, Sodium/Calcium Hyprochloride	Available Chlorine Alkalinity	ASTM D2022 ASTM D2022	590.00 590.00	For powder sample – 100g For liquid sample – 100mL For liquid sample – at least 50mL
Acid Copper Plating Solution	Copper Sulfate Sulfuric Acid	AAS/Titrimetry Titrimetry	800.00 590.00	at least 100mL
Cyanide Copper Plating	Copper Cyanide Sodium Cyanide	AAS/Titrimetry Titrimetry	800.00 590.00	at least 100mL
Chrome Plating Solution	Trivalent Chromium Hexavalent Chromium Sulfuric Acid	Titrimetry Titrimetry Gravimetric	590.00 800.00 850.00	at least 100mL
Gold Plating Solution	Gold	AAS	800.00	at least 20mL
Nickel Plating Solution	Nickel Chloride Nickel Sulfate Boric Acid	Titrimetry AAS/Titrimetry Titrimetry	590.00 800.00 590.00	at least 100mL
Silver Plating Solution	Silver	AAS	800.00	at least 20mL

	Free Na/K Cyanide	Titrimetry	590.00	
Zinc Plating Solution	Zinc	Titrimetry	590.00	At least 100mL
	Zinc	AAS	800.00	
	Sodium Cyanide	Titrimetry	590.00	
Brass Plating Solution	Copper	AAS	800.00	At least 100mL
	Copper	Titrimetry	590.00	
	Zinc	AAS	800.00	
	Zinc	Titrimetry	590.00	
	Free Cyanide	Titration	590.00	
Low Alloy Steel, Tool Steel, High-Alloy Steel, Cast Iron, Manganese Steel	Silicon	Gravimetric	950.00	at least 100g
	Phosphorous	Alkalimetric, Acidic Molybdate	700.00	
	Molybdenum	Photometric	1,100.00	
	Molybdenum (in cast iron)	Photometric	1,295.00	
	Manganese/Nickel/ Copper/Chromium	AAS	800.00 per element	
Stainless Steel, Nickel, Nickel-Chromium, Nickel-Chromium-Iron Alloys	Silicon	Gravimetric	950.00	at least 100g
	Molybdenum (for Stainless Steel)	Photometric	1,100.00	
	Nickel	Gravimetric	900.00	

	Chromium Manganese/Copper/Iron/ Cobalt	Titrimetry AAS	750.00 800.00 Per element	
Aluminum and Aluminum Alloy	Aluminum Silicon Magnesium/Chromium/ Copper/Lead/Iron/Zinc/ Manganese/Nickel	Titrimetry Photometric/ Gravimetric AAS	870.00 1,100.00 800.00 Per element	at least 100g
Pig Lead, White Metal-Bearing Alloys, Lead and Tin Based Solders	Lead Tin Silver/Bismuth/Copper/ Zinc/Antimony/Iron/ Nickel	Gravimetric/ Titrimetric Titrimetry AAS	1,050.00 750.00 800.00 Per element	at least 100g
Copper & Copper Alloy, Brasses, Bronzes	Copper Lead Tin Cadmium/Cobalt/Iron/ Manganese/ Nickel/Lead Zinc Tin	Electrolytic – Gravimetric Gravimetric Titrimetric/ Gravimetric AAS Titrimetric Titrimetric	900.00 1,050.00 450.00 800.00 Per element 1,500.00 760.00	at least 100g

Copper-Nickel, Copper-Nickel-Iron, Copper-Nickel-Zinc, Nickel-Copper Alloy	Copper	Electrolytic-Gravimetric	900.00	at l;east 100g
	Nickel	Gravimetric	900.00	
	Iron/Manganese/Cobalt	AAS	800.00 Per element	
Zinc and Zinc Alloy	Zinc	AAS	800.00	at least 100g
	Cadmium/Copper/Iron/ Nickel/Manganese/ Magnesium	AAS	800.00 Per element	
Metal (Gold/Platinum) Soft/not hard Powder form or not block	Gold	AAS	870.00	at least 5g
	Platinum	AAS	870.00	
Tin Cans, Tin Plates	Tin Coating, g/m2	Titrimetry	600.00	less than 1-kg cap-3pcs
	Tin Coating	Coulometry	600.00	1-kg cap – 1pc

GI Sheets, Pipes, Rods, Wires, Plates Zn-coating (per area) Flat bar – P 385.00 0.5m – 1m Angle Bar - P385.00 0.5m – 1m Machine bolt (cant be done)	Weight of Zinc Coating	Loss in weight g/m2 Stripping Method g/m2	450.00	Wire – 2m Pipe/Rod–1m Sheet/Plate-600cm2
	Weight of Zinc Coating Average or Single Spot			
	GI Sheets		450.00	
	GI Wires		490.00	
	Pre-coated GI Sheets		590.00	
	GI Pipes			
	<100 mm dia		500.00	
	100-150 mm dia		670.00	
	151-200 mm dia		800.00	
Glazed Ceramics/ Dinnerware	Extractable Pb/Cd	ASTM C738	1,450.00 per element	at least 6 identical pc
	Extractable Pb/Cd	GF-AAS	2,000.00 per element	
	Extractable Pb and Cd (Combd)	ASTM C738	2,500.00	
	Extractable Pb and Cd (Combd)	GF-AAS	3,000.00	

	Extractable Hg only Additional Hg for Pb/Cd	ASTM C738 ASTM C738	1,800.00 1,500.00	
Toys	Leachable Pb/Cd Leachable Pb/Cd Leachable Hg(only) Leachable Pb and Cd(combd) Leachable Pb and Cd(combd) Additional Hg for Pb/Cd Leachable Arsenic	ISO 8124-1997 GF-AAS ISO 8124-1997 ISO 8124-1997 GF-AAS ISO 8124-1997 ISO 8124-1997	1,180.00 per element 1,800.00 per element 1,800.00 2,000.00 2,700.00 1,500.00 1,800.00	at least 6 identical items
Pipes (uPVC, etc.)	Extractable Pb/Cd/Hg Extractable Pb/Cd Extractable Pb and Cd (combd) Extractable Pb and Cd (combd) Extractable Hg (additional for Pb/Cd)	ISO 3114-1997 (E) (PNS 65; 1993) GF-AAS ISO 3114-1997 (E) (PNS 65; 1993) GF-AAS ISO 3114-1997 (E) (PNS 65; 1993)	5,600.00 per element 6,300.00 per element 6,500.00 7,000.00 1,500.00	3 pcs sample if diameter □ 5 cm length – 0.5m 6 pcs sample if diameter □ 5 cm length – 1m Sealed at one end
Boiler Scale (100~150g)	Moisture Organic & Volatile Matter Silica	Tech. Method of Analysis by Griffin	600.00 590.00 1,320.00	100-150 g

	Iron & Aluminum Oxide		1,320.00	
	Lime (CaO)		590.00	
	Magnesia (MgO)		1,100.00	
	Sulfur Trioxide		930.00	
	Chloride		590.00	
	Phosphate		720.00	
Admixture	pH	USP 26.2003	290.00	500 mL
	Total Solids (%wt)	ASTM D2363	590.00	
	Density, kg/L	ASTM D1475	350.00	
	Chloride	D1411-93	720.00	

PHYSICAL AND PERFORMANCE TESTING LABORATORIES

SAMPLE NAME	TEST NAME	TEST METHOD	TEST FEE (PhP)	SAMPLE REQUIREMENT
Sacks	Breaking Strength			3 pieces of whole sack per sample
	One Way	ASTM D5034	600.00	
	Other Way	ASTM D5034	600.00	
	Bursting Strength	ASTM D3786	450.00	
	Fabric Count			
	One Way	ASTM D3775	200.00	
	Other Way	ASTM D3775	200.00	
Duty Free Shopping bag	Required Test	ASTM D882		20 Bags/Size
	Tensile / Elongation	ASTM D882	550.00	
	Tear Strength	ASTM D1004	550.00	

	Sealing Strength Handle Performance Thickness Sample Conditioning	ASTM D882 ASTM D882 ASTM D618	550.00 550.00 200.00 1,500.00	
Perlite Insulation	Density Moisture content Conditioning (Oven & 24 Hr. @ 23 C , 50% RH) Flexural Strength Compressive Strength	ASTM C303 ASTM C610 sec 11.1.7 ASTM C203 ASTM C165	350.00 350.00 1,000.00 400.00 400.00	200mm x 100mm x 50mm, 5 pcs 150mm x 150mm x 50mm , 5 pcs 12 in x 4 in x 1 in , 5 pcs 4 in x 6 in x ½ in , 5 pcs
PVC Pipes	Resistance to Acetone Resistance to H2SO4 for 14 days days @ 55℃ Longitudinal Heat Reversion Test Vicat Softening Point	ISO 3472 ISO 3473 ISO 2505 ISO 2507	250.00 9,400.00 700.00 350.00 800.00	5 pcs (100mm x 25 mm) 5 pcs (area / pc 45 ± 3 cm3) (for 3 size additional) 5 pcs (L = 200 mm) 5 pcs (L = 50 mm , W = 10 to 20mm , t= 2.4 to 6 mm) (if t= 2.4 mm , use two layers of at least t=2.4 total. Thickness)

	Water Absorption	ISO 2508	600.00	5 pcs (area / pc 50 cm2 for pipes w/ 32 mm OD or L = 5 cm and arc 5 cm for pipes with OD > 32 mm)
	Flattening Test	ASTM D2241	400.00	5 pcs. (L = 2 inches
	Resistance of External Blows (Drop Impact)	ISO 3127	1,500.00	pcs. (L= 10 inches)
	Hydrostatic Test	PNS 509	1,500.00	250mm + 3x O.D + 100 mm, 5 pcs pipe
Rubber Products	Aging Test	ASTM D573		Same as Tensile & tear Resistance Test
	22 h		700.00	
	48 h		1,500.00	
	70 h		2,200.00	
	72 h		2,250.00	
	96 h		3,.000.00	
	100 h		3,100.00	
	168 h		6,000.00	
	336 h		10,500.00	
	Compression Set	ASTM D395	1,000.00	5 pieces , cylindrical disk type, 1"diameter @ 12 mm Thickness

	Density / Specific gravity	ASTM D792	350.00	50 grams , granule, pellets , solids 1mm thickness /1gram
	Durometer Hardness	ASTMD2240 ISO 868 vol.1	250.00	2 pieces flat surface 10 x 10 cm , t=6mm min
	Tensile Strength & Elongation	ASTM D412	400.00	2 sheets , 305mm x 305mm x t mm (1.3 < t < 3)
	Tear Resistance	ASTM D624	400.00	
	Sampling Fee		150.00/ test	
	Abrasion Resistance	ASTM D4060	1,500.00	4" x 4", 1/8 "t or less, 5 pcs
Plastic Products	Chemical Immersion Test	ASTM D543	350.00	50mm L x 25.4mm W, 5 pcs
	Compression (W x H x L)	ASTM D695	400.00/ 800	½ "x ½ " x 2 , 5 pcs
	Flexural Strength	ASTM D790	400.00/ 800	5 pieces , smooth flat surface , L=16 x thickness +20mm Depth = 13mm , Width 3 to 13mm
	Water Absorption	ASTM D570	350.00	50mmL x 25.4mm W, 5 pcs

	Tension Test	ASTM D638/ D882	400.00/ 800	5 pieces dumbbell shape , or W= 10 mm to 25.4 mm (15mm Preferably) L=125mm to 250 mm
	Heat Deflection Temperature	ASTM D648	800.00	5 pieces, smooth flat surface, L =127mm Width=13mm, Thickness= 3 to 13mm
	Vicat Softening Point	ASTM D1525	800.00	5 pcs (L = 50 mm , W = 10 to 20mm , t= 2.4 to 6 mm) (if t= 2.4 mm , use two layers of at least t=2.4 total Thickness)
	Izod Impact	ASTM D256	600.00	L=63.5 or 60.3mm, t=3.17 to 3.4 mm, W= 12.7 mm, 10 pcs
	Charpy Impact	ASTM 179	600.00	4.0 mm x 80 mm, 10 pcs
	Hardness Test	ASTM 2240	250.00	2 pieces flat surface 10 x 10 cm , t=6mm min

	Abrasion Resistance Test	ASTM D4060	1,500.00	4" x 4" 1/8"t or less 5 pcs
	Conditioning (at least 40 Hrs @ 23 +/- 2° C , 50 +/- 5 % RH)		1,000.00	
Epoxy	Compression	ASTM C356	400.00	2" x2 " x 2", 5 pcs
Plastic Resin	Melting point	ASTM D2117	200.00	100 grams (granules , pellets or powder
	Melt flow Rate	ASTM D1238	600.00	100 grams (granules , pellets or powder
	Density	ASTM D792	350.00	100 grams (granules , pellets or powder
PVC Powder	Bulk Density/Apparent Density	ASTM D1895	250.00	0.5 kilograms
Particle Board	Density	Philsa 106 / App.B/D		
	Block		350.00	5 pcs , 6 " x 6 "
	Pipe		350.00	1 pipe section
	Compression		400.00	5 pcs , 6 " x 6 "
	Flexural		400.00	5 pcs , 12 " L x 4 " W x 2 " T
	Water Absorption		350.00	5 pcs , 6 " x 6 "
	Linear shrinkage		400.00	5 pcs , 6 " x 6 "
Adhesive / Sealant	Peel strength	ASTM D903	400.00	10 pcs , 12 " L x 1 " W overlap by 6"
	Shear strength	ASTM D1002	400.00	10 pcs , 5 " L x 1 " W overlap by 1 "
	Sampling Fee	BS 3261	150.00	
Vinyl Tiles	Tension Test		400.00	10 pcs , 12 " x 12 "

	Resistance Test/ chemicals Dimension Test Size Thickness Width Taber Abrasion	 ASTM D4060	350.00 600.00 200.00 200.00 200.00 1,500.00	 4 " x 4" , 5 pcs
Joint Filler	Compression Recovery Density Water Absorption	ASTM D505	2,200.00	2 pcs , 12" x 12"
School and Office Supplies:				
Masking / Scotch / Packaging Tape	Adhesive Strength	PNS 712	550.00	3 rolls
Glue	Adhesive Strength	PNS 1800-2006	550.00	2 jar
Rubber Band	Tensile Strength / Elongation/ Dimensional Measurements	PNS 1479	400.00 200.00	1 box or 100 pcs
Ball Point Pens & Refills	Writing Performance Drying Time Test Water resistance	ISO 12757 – 2 PNS 558	400.00 400.00 350.00	10 pcs.
White Board Marker	Writing Performance Impact Resistance Heat Resistance Shaft Holding Force Point Primary Erase ability	PNS 1227	400.00 400.00 400.00 400.00	15 pcs.
Permanent Pen	Writing Performance	PNS 2049	400.00	15 pcs

	Impact Resistance Shaft Holding Force Point Drying Time Resistance to Water		400.00 400.00 400.00 400.00	
Paper Fastener	Bend Test	PNS 235	400.00	10 pcs.
Chalk	Breaking Strength	PNS 1122	400.00	25 pcs.
Pencil	Breaking Strength	PNS 1413	400.00	10 pcs.
Lead for Mechanical Pencil	Bending Strength	PNS 1471 -3 (ISO 9177-3	400.00	12 pcs. Or 1 box
Crayons	Performance Test	PNS 1224	400.00	1 box
Adhesive Tape	Adhesive Strength	PNS 712	550.00	5 rolls
PVC Electrical Tape	Exposure to Heat 113℃ (168 h) Tension Appearance Peeling Off Tension After heat Aging @ 100℃ for 4 hr.	PNS: 79	6,500.00 400.00 250.00 550.00 700.00	10 rolls
Crane and other Lifting Equipment	Load Testing, 50 Tons & 200 Tons	ISO 4310	2,700.00	
Burned Refractory Brick	Bulk Density Water Absorption	ASTM C20-Sec 12	400.00 350.00	3 pcs, 50 mm cube 3 pcs 76.2 mm cube
Concrete Interlocking Roofing Tiles	Transverse Water Absorption	Philsa 242	400.00 350.00	6 pcs full size

Concrete Hollow Block	Compression	ASTM C39	800.00	5pcs /size
Concrete Cylinder	Compression		800.00	3 pcs, 152.4 mm x 304 mm with capping
Wire Rod	Tension Test Flexural/Bend Test	ASTM A370	400.00 400.00	3 pcs, 13" L 5 pcs, 12" L
Hydraulic Cement Mortar	Compression	ASTM C109	800.00	3 pcs, min. 50 mm cube
Cement Powder	Permeability Test/ Fineness of Hydraulic Cement Initial & Final Setting of cement	ASTM C204 ASTM C191	400.00 800.00	1 kg powder cement
Weathermeter	Exposure test	ASTM G155	6000.00/ day	Tray size: 28" x 17.5"
	Observation		300.00/ sample	

BIOLOGICAL LABORATORY
PHARMACOLOGY AND SECTION

SAMPLE NAME	TEST NAME	TEST METHOD	TEST FEE (PhP)	SAMPLE REQUIREMENT
Plant Isolates/ Food Supplements	Approximate Lethal Dose	OECD Guideline 401	7,900.00	50 g
	Analgesic (Plantar)	Hargreaves Method	4,800.00	50 g
	Anti-inflammatory Test	Winter Method	4,200.00	50 g
	Diuretic Test	Lipschitz Method	3,800.00	50 g
	Acute Oral Toxicity (LD50)	OECD Guideline 401	20,000.00	500 g/1 L
Cosmetics	Preliminary Dermal Irritation	OECD Guideline 404	7,250.00	50 g
	Dermal Irritation	OECD Guideline 404	11,750.00	100 g
	Preliminary Eye Irritation	OECD Guideline 405	7,250.00	50 g
	Eye Irritation	OECD Guideline 405	11,750.00	100 g
	Dermal Sensitization	OECD Guideline 406	48,500.00	500 g/1 L
Pesticides	Acute Oral Toxicity (LD50)	OECD Guideline 401	42,500.00	1 L
	Acute Dermal Toxicity	OECD Guideline 402	52,500.00	1 L
	Dermal Irritation	OECD Guideline 404	20,000.00	1 L
	Eye Irritation	OECD Guideline 405	25,000.00	1 L
	Dermal Sensitization	OECD Guideline 406	48,500.00	1 L
Household Pesticides	Acute Oral Toxicity (LD50)	OECD Guideline 401	21,200.00	1 L
	Acute Dermal Toxicity	OECD Guideline 402	29,000.00	1 L
Note: Fees are exclusive of laboratory animals and animal feeds.				

BIOLOGICAL LABORATORY
MICROBIOLOGY SECTION

SAMPLE NAME	TEST NAME	TEST METHOD	TEST FEE (PhP)		SAMPLE REQUIREMENT
			Single Sample Testing	Five Sample Testing (FDA)	
Water	Bacteriological Examination A (HPC + Coliform Count)	Standard Methods for the Analysis of Water and Wastewater 21st Edition, 2005 APHA, AWWA, WEF	*980.00	**2,940.00	*At least 120 mL x 1 ** At least 120 mL x 5 Sample Submission: Mondays, Tuesdays and Wednesdays 8:00 AM – 2:00 PM
	Bacteriological Examination B (HPC, Coliform Count+ E. coli Count)		*1,580.00	**4,740.00	
	Heterotrophic Plate Count (HPC)		*500.00	**1,500.00	
	Total Coliform Count		*500.00	**1,500.00	

	E. coli Count		*1,200.00	**3,600.00	
	Pseudomonas sp. Count		*720.00	**2,160.00	
	Fecal Streptococci		*1,200.00	**3,600.00	
	Total Coliform Count and E. coli Count (Enzyme substrate)		*1,500.00	**4,500.00	
Food, Cosmetics, Extracts, Veterinary Products etc.	Aerobic/ Total/ Standard Plate Count	Bacteriological Analytical Manual, Online US Food and Drug Administration	*500.00	**1,500.00	*at least 100 g/mL x 1
	Total Coliform Count		*500.00	**1,500.00	**at least 100 g/mL x 5
	E. coli Count		*1,200.00	**3,600.00	***cans/ bottles x 5
	Molds and Yeast Count		*500.00	**1,500.00	****cans/ bottles x 10
	Salmonella sp. Detection, Presumptive (Conventional)		*900.00	**2,700.00	
	Salmonella sp. Detection (Rapid)		*2,000.00	**2,700.00	
	Staphylococcus aureus Count		*1,200.00	**3,600.00	
	Pseudomonas sp. Count		*720.00	**2,160.00	

	Commercial Sterility		***1,570.00	****4,400.00	
Plant Extracts, Cosmetics, Disinfectants etc.	Antimicrobial Activity (E. coli, S. aureus, P. aeruginosa, S. typhimurium, B. subtilis)	The US Pharmacopeia 30 NF 25, 2007	500		at least 50 mL Customer will provide cultures not available in the laboratory. Some of these cultures could be purchased from EBD-ITDI.
	Antifungal Activity (S. cerevisiae, C. albicans, A. niger, F. monoliforme, T. mentagrophytes, T. rubrum, Microsporum canis)		500		

ISSUANCE OF FORMULA OF CONVERSION (FOC) CERTIFICATE

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
Issuance of Formula of Conversion (FOC) Certificate	Manufacturing company (exporter)	Validation of technical service request	Laboratory Head/ designated validator	30 mins	Request for Technical Services FOC Form; pertinent documents subm (i.e. certified material usage, production data, description and flow chart of manufacturting process); samples of raw materials and products
		Assignment of FOC to analyst	Laboratory /Section Head	15 mins	Request for Technical Services FOC Form & other documents submitted by customer; workload of laboratory analysts
		Conduct of Plant Visit	Analyst & Laboratory Head or designated staff to accompany analyst	1 day	Request for Technical Services FOC Form & other documents submitted by customer; plant visit schedule/permit
		Evaluation/computation of proposed FOC	Analyst	within the day	Production/manufacturing data; process description; samples of raw materials and products

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
		Preparation of FOC Report	Analyst	within the day	Request for Technical Services FOC Form; computations
		Review/Signing of FOC Report	Laboratory Head & Section Head	within the day	Request for Technical Services FOC Form; FOC Report signed by Analyst; computations
		Finalization/Signing of FOC Report	Division Chief	within the day	FOC Report signed by Analyst; Section Head & Laboratory Head
		Releasing of FOC Report	RRU Staff	15 mins	Signed FOC Report; customer's copy of Request for Technical Services FOC Form
		Report Filing & Management	RRU Staff	15 mins	STD's copy of FOC Report, Request for Technical Services FOC Form, STD's database of customers' requests/services

STANDARDS AND TESTING DIVISION

PROCEDURE FOR FILING COMPLAINTS

Complaints may be filed by a customer by any of the following two methods:

1. The customer asks for the Survey/Complaint Form from the Receiving and Releasing Unit. He fills up the form and drops the accomplished form in the STD Suggestion box placed at the Front Lobby of the STD building.

2. The customer writes to the STD Chief describing in full his/her complaint/s. All letters of complaint may be sent by regular or electronic mail, fax or in person at the Office of the Chief, Standards and Testing Division, DOST Compound, Bicutan, Taguig City.

Complaint Resolution

A. For not meeting the due date

1. The STD staff who receives a complaint from a client requests the following information:

   a. the name, company and contact address or telephone or fax number of the person making the complaint;
   b. the Request Reference Number, if complaint pertains to a particular sample;
   c. the nature and description of the complaint.

1. STD addresses all customer complaints through the following methods of resolution:

   a. When a request for technical service has not been given timely placement on the laboratory work schedule, the Laboratory Head concerned will:

      - If possible, reschedule the work for an earlier date;
      - If rescheduling is not possible, explain the laboratory workload to the customer and assure the customer that the laboratory will complete the work as soon as possible.

   b. When the laboratory has not completed work on time, the Laboratory Head will:

      - Determine the due date and the date of reporting;

B. For non-conforming testing service/work

1. Whenever a complaint of non-conforming work is received, the Laboratory Head immediately evaluates the significance of the complaint.

2. If there is a high significance of the complaint, necessary correction/s are made follows:

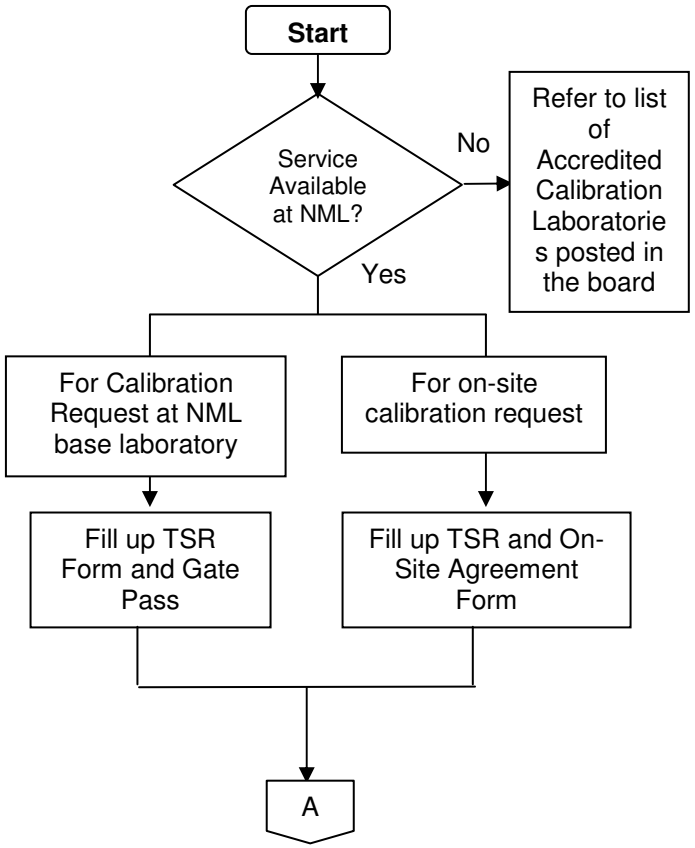
   - The Laboratory Head immediately stops an on-going work and may order resumption of work only when correction/s have been undertaken.
   - Where the Test Report had already been released to the customer, the Laboratory Head and the Division Chief decide if there is a need to perform a re-test, amend and invalidate the Test Report.

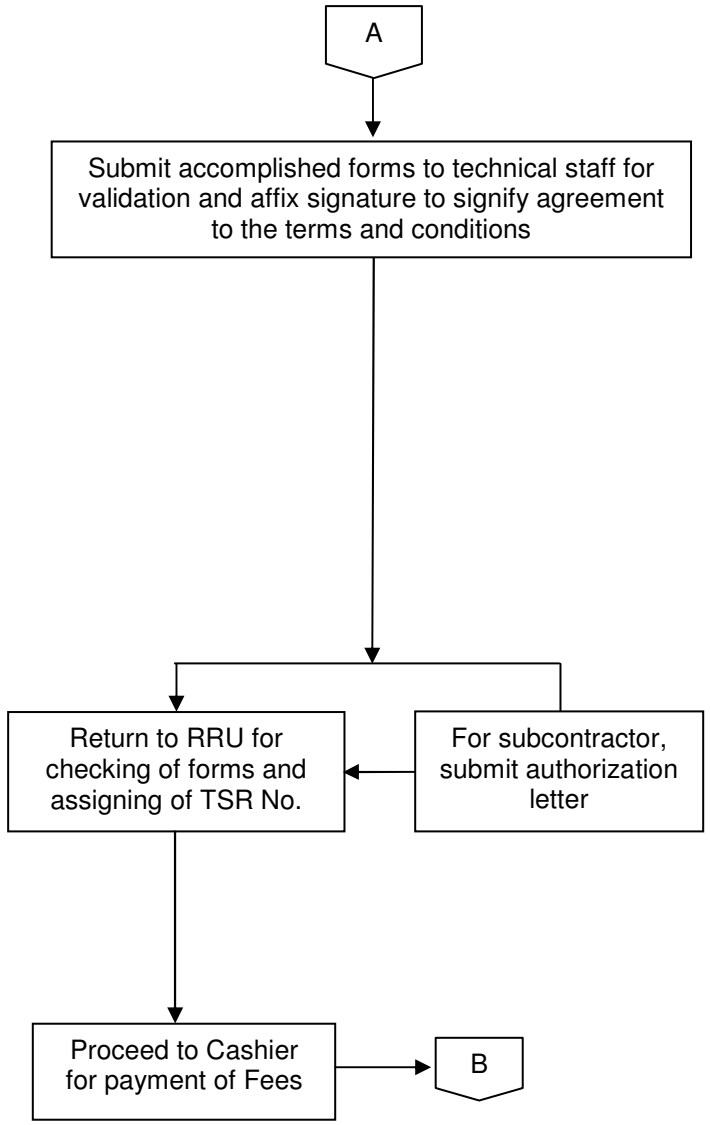
3. If there is a need for the above action/s, the Division Chief sends a written notice to the customer. The notice shall include:

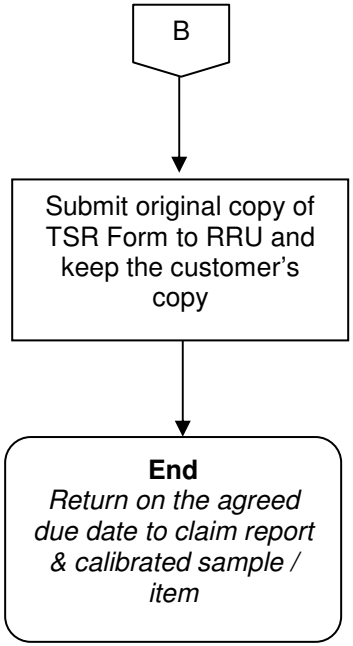
   a. the reason for the re-test, amendment or invalidation of the Test Report;
   b. the identity of the Test Report for revision;
   c. a request to recall the Test Report for revision;
   d. a statement that all revision of test reports and all re-tests will be provided without charge;
   e. a statement that it is the customer's option to decide whether or not to revise the Test Report

NATIONAL METROLOGY LABORATORY

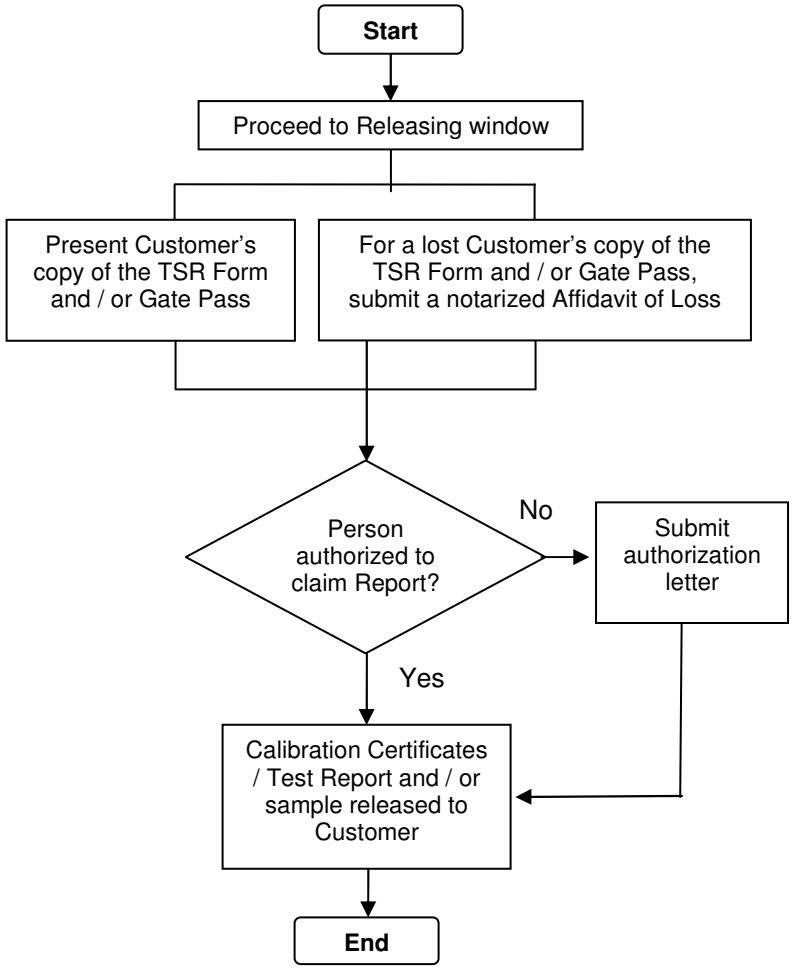
REVIEW OF REQUEST

FRONTLINE	CUSTOMER	PROCEDURES	RESPONSIBLE PERSON	DURATION	REQUIREMENTS
Review of Requests	Industry / Government / Individual		Customer / RRU Staff Customer	Maximum of 5 minutes for routine samples 10 minutes for defined customer's requirement *(duration may vary depending on ability of customer to provide details on the required accuracy, test pts. & range of calibration)*	Identity of sample to be calibrated or to be measured & measurement parameters Technical Services Request Form and Gate Pass and/or On-Site Agreement Form

			Technical Staff / Validator / Customer Customer / RRU Staff Customer / ITDI Cashier	15 min. for routine samples & On-site request *(duration may vary depending on the necessary details provided by the customer and the type of samples and the corresponding checks / functional test required* 5 minutes per TSR Form 10 minutes	Sample, Accomplished Technical Services Request Form and Gate Pass and/or On-Site Agreement Form Validated TSR Form, *(Authorization Letter), (Sample),* Gate Pass or On-Site Agreement Form Validated TSR Form

			Customer / RRU Staff	2 minutes	Validated TSR Form with filled up payment particulars

RELEASING OF CALIBRATION CERTIFICATES / REPORT AND CALIBRATION ITEM

FRONTLINE	CUSTOMER	PROCEDURES	RESPONSIBLE PERSON	DURATION	REQUIREMENTS
Releasing of Certificates / Reports and calibrated items	Industry / Government / Individual		Customer Customer / RRU Staff Customer / RRU Staff	5 min. 5 min. 10 min. per report for on-site calibration report and 15 min. per sample for base lab. Calibration *(duration may vary depending on type of sample & extent of inspection required*	Customer's Copy of TSR and Gate Pass for base lab. calibration or On-site agreement form for on-site calibration; Notarized affidavit of loss for the lost customer's copy of TSR ID of person who brought the sample / instrument otherwise an Authorization Letter Calibration Certificate, Test Report, TSR, Labeled sample / instrument

NATIONAL METROLOGY LABORATORY

TEST METHOD AND TEST FEES:

FORCE AND PRESSURE CALIBRATION

NO.	ITEM NAME	TEST METHOD	TEST FEE
1	Deadweight Pressure Gauge Tester / Pressure Balance		
	Performance Testing	Based on Fall Rate, Friction and Eccentricity	1,540.00
	Piston Diameter Measurement (per piece)		500.00
	Deadweight - Mass Measurement (Stainless Steel; per pice)		250.00
	Deadweight - Mass Measurement (Other Materials; per pice)		200.00
2	Pressure Calibrators / Transmitter / Transducer / Module / Vacuum Calibrator / Digital Manometer / Digital Manometer (10 test points per range)		

Note: All fees are subject to change without prior notice.

	Absolute / Gauge Pressure (0-5MPa x 0.001MPa resolution) Negative Pressure (10mbar - 1000mbar)		4,790.00
	0-500MPa Gauge Pressure		4,700.00
	additional test point		500.00
3	Pressure Test Gauge (10 test point per range)		
	Absolute / Gauge Presure (0 - 5 Mpa x 0.001 Mpa resolution)		2,590.00
	0 - 500 Mpa Gauge Pressure		2,350.00
	Additional test point		330.00
4	Pressure Gauges (Accuracy > 1%)		750.00
5	Sphygmomanometer (Aneroid and Non-automated)		750.00

Note: All fees are subject to change without prior notice.

MASS CALIBRATION

NO.	ITEM NAME	TEST METHOD	TEST FEE
Calibration of Test Weights			
1	Test weights Class E2 (per piece)	OIML Standard	
	1mg to 200g		840.00
	over 200g to 5kg		1,140.00
	over 5kg to 10kg		1,260.00
2	Test weights Class F1 (per piece)	OIML Standard	
	1mg to 200g		300.00
	over 200g to 5kg		510.00
	over 5kg to 10kg		760.00
3	Test weights Class F2 (per piece)	OIML Standard	
	1mg to 200g		300.00
	over 200g to 5kg		510.00
	over 5kg to 10kg		760.00
4	Test weights Class M1 (per piece)	OIML Standard	
	1mg to 200g		200.00
	over 200g to 5kg		300.00
	over 5kg to 10kg		350.00
5	Test weights Class M2 (per piece)	OIML Standard	
	1mg to 200g		200.00
	over 200g to 5kg		300.00
	over 5kg to 10kg		350.00
6	Test weights Class M3 (per piece)	OIML Standard	
	1mg to 200g		200.00
	over 200g to 5kg		300.00
	over 5kg to 10kg		350.00
7	Cast Iron		
	1mg to 200g		200.00
	over 200g to 5kg		300.00
	over 5kg to 100kg		350.00
	over 100kg to 1200kg		500.00
Testing of Weighing Instruments			
	Special Accuracy I		1,180.00
	HighAccuracy II		930.00
	Medium Accuracy III		840.00
	Ordinary IIII		340.00
For every tonne thereafter in excess of 1 ton			20.00

Note: All fees are subject to change without prior notice.

FORCE STANDARD

NO.	ITEM NAME	TEST FEE
1	Durometer (Type A; 5 test points per range)	600.00
2	Gram Gauge (5test points range)	980.00
3	Push Pull Gauge (5 test points range) 0 – 20 kgf Above 20 kgf	 1,400.00 1,960.00
4	Testing Machine / compression Machine / Tensile / UTM (5 test points per range)	1,960.00
	Additional test point	490.00
5	Torque Wrench (capacity up to 25N m; 5 test points per range)	1,540.00
	Two directions	2,31.00

Note: All fees are subject to change without prior notice.

TEMPERATURE AND HUMIDITY STANDARDS

INSTRUMENT	TEMPERATURE / RH RANGE	TYPICAL NO. OF TEST POINTS	CALIBRATION FEE
Thermocouples (As new)	-20^{0}C to 1000^{0}C	6	3,500.00 + 750.00 (per additional test point)
Dry Block Calibrators	-20^{0}C to 1000^{0}C	6	3,500.00 + 750.00 (per additional test point)
Electronic Hygrometers / Thermo-Hygrometers	30% RH to 70% RH	2	980.00
Enclosure Testing (Ovens, Incubators, Wtaer Bath, Furnaces, etc.)	-20^{0}C to 1000^{0}C	1	2,100.00 (per test point)
Non-Contact Thermometers	0^{0}C to 500^{0}C 500^{0}C to 1000^{0}C 1000^{0}C to 1200^{0}C	3 3 3	2,100.00 3,500.00 5,390.00

Note: All fees are subject to change without prior notice.

PHOTOMETRY STANDARD

NO.	EQUIPMENT	TEST FEE
1	Illuminance Meter	2,000.00
2	Luminous Intensity Standard Lamp	3,000.00
3	Luminous Flux Standard Lamp	3,000.00

Note: All fees are subject to change without prior notice.

COMPLAINTS PROCEDURE

1. Introduction

This procedure covers the resolution of complaints received from customers or other parties.

2. Purpose

The purpose of the customer complaint resolution system is to ensure that:

2.1.1 Customer complaints are resolved quickly and effectively;

2.1.2 Services provided to the customer are the highest quality possible.

3. Responsibility and Authority

3.1 The NML Chief

3.1.1 Receive complaints;

3.1.2 Orders the investigation of customer complaints, and the initiation of remedial and corrective actions to resolve customer complaints.

3.1.3 Informs customers affected by the recall of non-conforming calibration work.

3.2 The Section Head

3.2.1 Determines the details of the complaint, e.g. root cause, magnitude, extent and significance of all events that gave rise to the complaint

3.2.2 Takes remedial action to resolve the complaint.

3.2.3 Initiates recall of non-conforming calibration work.

3.3 The Quality Manager

3.3.1 Informs the customer of the resolution of the complaint.

4. Procedure

4.1 Customer complaints – initial contact.

4.1.1 The customer fills-up Complaint Form confidentially. (Use F4.8 Complaint Form for this purpose.)

4.1.2 The customer hand over the Complaint Form to the NML Chief or his Officer-In-Charge in his absence.

4.2 Customer complaints – resolution

4.2.1 The NML Chief orders the concerned Section Head to conduct an investigation of the customer complaint, initiation of remedial and corrective actions to resolve the customer complaint, and the recall of calibration reports, if warranted.

4.2.2 The Section Head

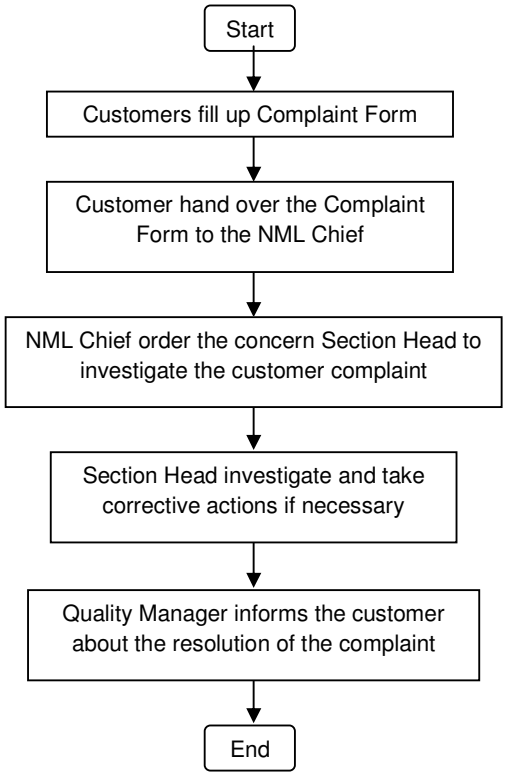
4.2.2.1 Determines the details of the complaint, e.g. root cause, magnitude, extent, and significance of all events gave rise to the complaint;

4.2.2.2 Takes remedial action to resolve the complaint per OM 4.11: Corrective Action, and OM 4.9: Control of Non-Conforming Calibration Work.

4.2.2.3 Initiates recalls, if any per OM 4.9: Control of Non-Conforming Calibration Work.

4.2.2.4 Records the resolution of the complaint in the complaint form.

4.2.3 The Quality Manager informs the customer of the resolution of the complaint.



5. Records

5.1 Complaint Form

Republic of the Philippines
Department of Science and Technology
Industrial Technology Development Institute
NATIONAL METROLOGY LABORATORY
DOST Compound, General Santos Avenue, Bicutan, Taguig City, Metro Manila
Tel. Nos.: 8372071 to 82 (DOST Trunklines) Telefax No.: 8373167; 8372071 loc. 2272

COMPLAINT FORM

(Fill-up privately, fold to hide contents and hand over to the NML Chief)

Date of Filing: …….

Name of Complainant: ……..……..…… Signature: .....

Designation: .....

Company Name: .....

Address: .....

.....

Contact Number: .....

E-Mail: .....

SPECIFICS OF COMPLAINT: *(Back of page may be used)*

.....

.....

.....

.....

FINDINGS:

.....

.....

.....

RESOLUTION:

.....

.....

.....

Complaint acted upon by: ..... Approved by: .....

Date: ..... Date: .....

( ) Customer informed of resolution By: ..... Date: .....

Republic of the Philippines
Department of Science and Technology
Industrial Technology Development Institute
NATIONAL METROLOGY LABORATORY
DOST Compound, General Santos Avenue, Bicutan, Taguig City, Metro Manila
Tel. Nos.: 8372071 to 82 (DOST Trunklines) Telefax No.: 8373167; 8372071 loc. 2272

NML SUGGESTION / OPPORTUNITY FOR IMPROVEMENT FORM

Improvement Area: ..... Time Frame: .....

Objective: .....

.....

.....

.....

Specifics of Improvement/Suggestion:

.....

.....

.....

Person making suggestion: ..... Date: ...../ ...../ .....

Person responsible for considering suggestion (LAB Head/NML Chief) .....

Action Taken:

.....

.....

.....

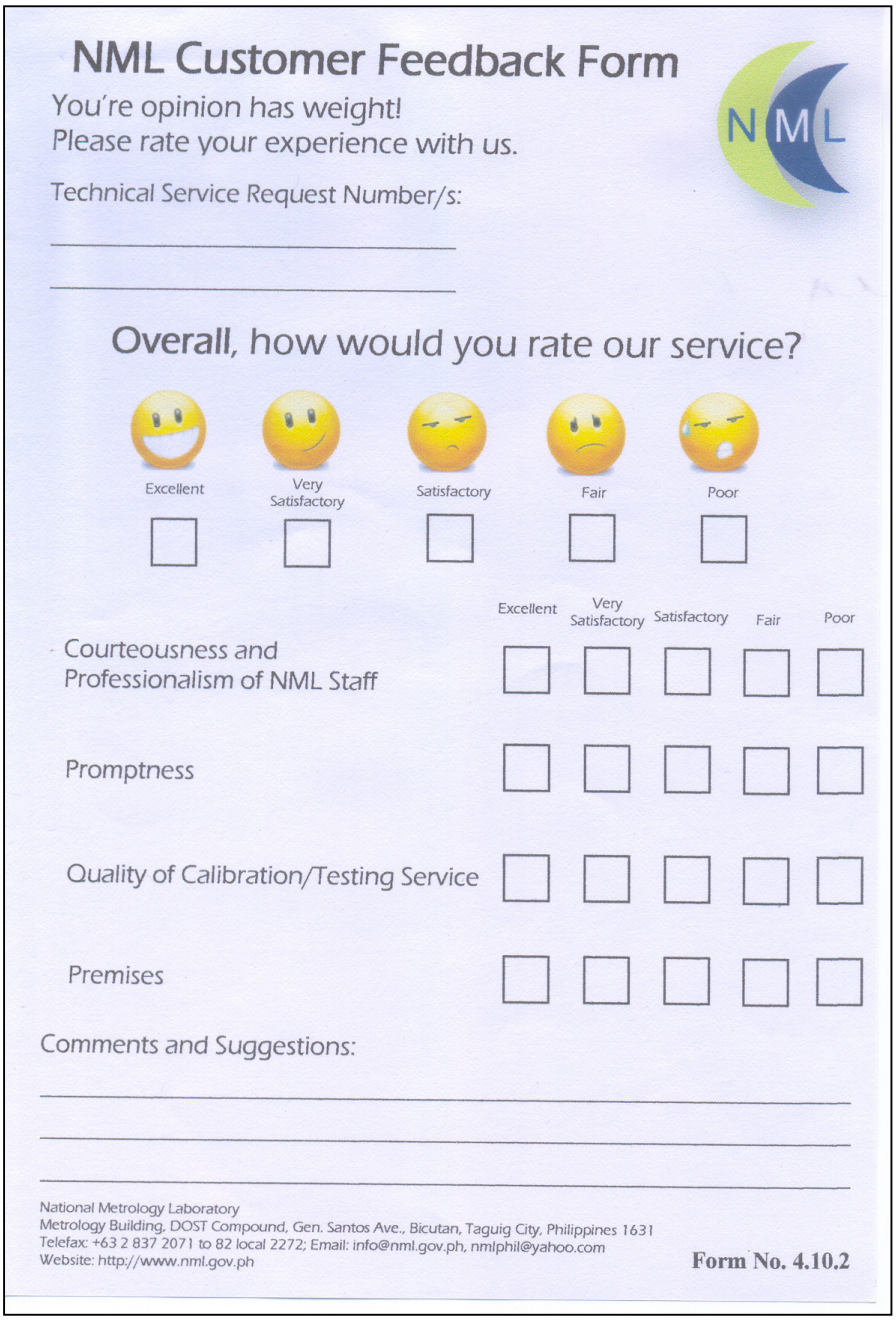
.....

Performed by: ..... Date: ...../ ...../ .....

Verified by (LAB Head/NML Chief) .....Date: ...../ ...../ .....

Action Closed by: (Quality Manager)..... Date: ...../ ...../ .....

NML CUSTOMER FEEDBACK FORM



NML Customer Feedback Form

You're opinion has weight!
Please rate your experience with us.

Technical Service Request Number/s:

_____

_____

Overall, how would you rate our service?

Excellent	Very Satisfactory	Satisfactory	Fair	Poor
☐	☐	☐	☐	☐

	Excellent	Very Satisfactory	Satisfactory	Fair	Poor
Courteousness and Professionalism of NML Staff	☐	☐	☐	☐	☐
Promptness	☐	☐	☐	☐	☐
Quality of Calibration/Testing Service	☐	☐	☐	☐	☐
Premises	☐	☐	☐	☐	☐

Comments and Suggestions:

_____

_____

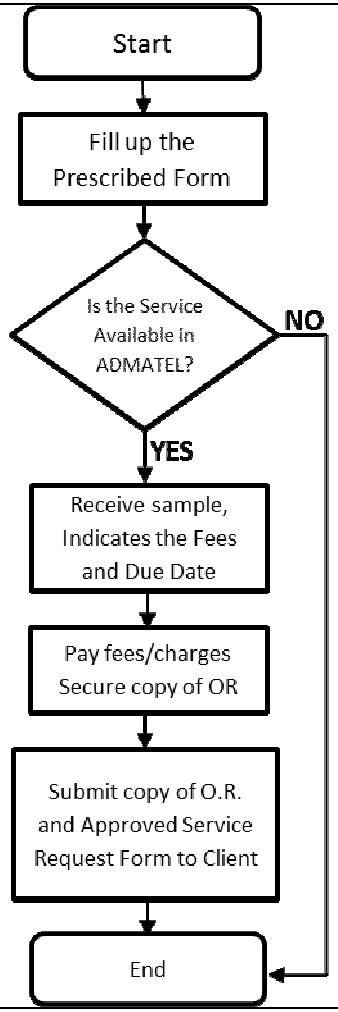
_____

National Metrology Laboratory
Metrology Building, DOST Compound, Gen. Santos Ave., Bicutan, Taguig City, Philippines 1631
Telefax: +63 2 837 2071 to 82 local 2272; Email: info@nml.gov.ph, nmlphil@yahoo.com
Website: http://www.nml.gov.ph

Form No. 4.10.2

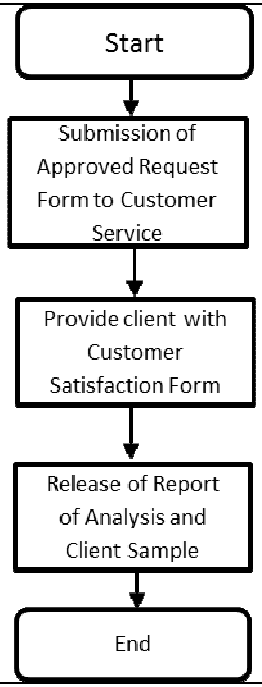
ADVANCED DEVICE AND MATERIALS TESTING LABORATORY

SAMPLE RECEIVING

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
Sample Receiving	Company/ Institution/ Individual		Client	5 minutes	Technical Service Request Form;
			Laboratory Head	15-30 minutes (Duration may vary depending on the details of request)	Accomplished Request Form; Specific details of the request;
			Laboratory Head	2 minutes	Entry Pass for the sample; Reference no. for Service Request Form; Sealed plastic bag for the sample;
			Customer Service Personnel	20 minutes	Approved Service Request Form with Reference no.; Copy of OR;
			Customer Service Personnel	2 minutes	Copy of OR and Approved request form

ADVANCED DEVICE AND MATERIALS TESTING LABORATORY

RELEASING OF REPORTS AND SAMPLES

FRONTLINE	CLIENT/S	PROCEDURES	RESPONSIBLE PERSON	TIME	REQUIREMENTS
Releasing of Reports and Samples	Company/ Institution/ Individual		Client	1 minute	Approved Service Request Form with ref. no.
			Customer Service	5 minutes	Customer Satisfaction Form
			Laboratory Head	5 minutes	Accomplished Customer Satisfaction Form; Approved Service Request Form with ref. no.; Exit Pass for Sample;

ADVANCED DEVICE AND MATERIALS TESTING LABORATORY

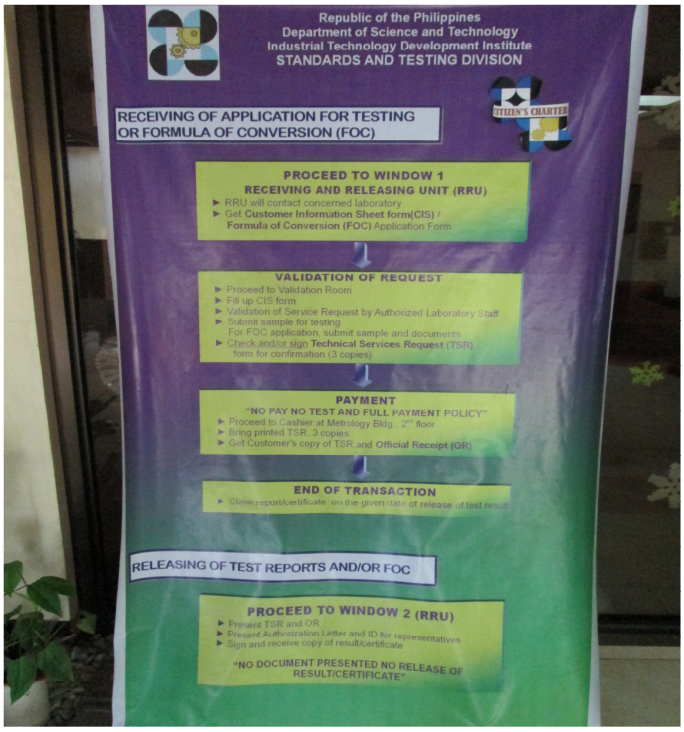
SCHEDULE OF FEES AND CHARGES FOR TESTING AND ANALYTICAL SERVICES

	Type of Service	Cost/sample (PhP)
1	**Auger Electron Spectroscopy (AES)**	
	Element Identification (Qualitative & Quantitative Analysis)	12,000.00
	Surface Map Analysis (1 view, 4 elements)	26,000.00
	Line Analysis Measurement (1 line, 4 elements)	23,000.00
	Depth Profile Analysis (up to 0.1 um depth, 4 elements)	32,000.00
2	**Time of Flight Secondary Ion Mass Spectroscopy (TOFSIMS)**	
	Surface Spectroscopy	13,000.00
	Surface Spectroscopy w/ mapping	18,000.00
	Depth Profiling (4 elements or compounds)	23,000.00
3	**Focused Ion Beam-Field Emission Scanning Electron Microscopy (FIB-FESEM)**	
	Scanning Electron Microscopy	
	- Imaging	10,000.00
	- Imaging w/ EDS Analysis	14,000.00
	- Imaging w/ EDS Mapping	19,000.00
	Focused Ion Beam Sectioning	18,000.00
	TEM Lamella Preparation	22,000.00
	STEM Imaging Analysis	17,000.00
4	**FTIR with Microscope**	
	Materials characterization/ Identification	5,000.00
	Materials characterization/ Identification w/ imaging	6,500.00
5	**Differential Scanning Calorimetry (DSC)**	
	Tg/ heat capacity/ Tm/ heat of fusion/degree of curing	3,000.00

6	**Thermogravimetry- Differential Thermal Analyzer (TG-DTA)** Thermal properties: % weight loss/oxidative degradation / stability / % residue	3,000.00
7	**Optical Microscope** External visual inspection/Microscopic observation	2,000.00
8	**Cutter, Grinder & Polisher and Stereomicroscope** Cross-sectioning (Cutting, Mounting, Grinding, Polishing and Optical Microscopy)	3,800.00
9	**Draft/Fume Hood and Stereomicroscope** Decapsulation	3,800.00

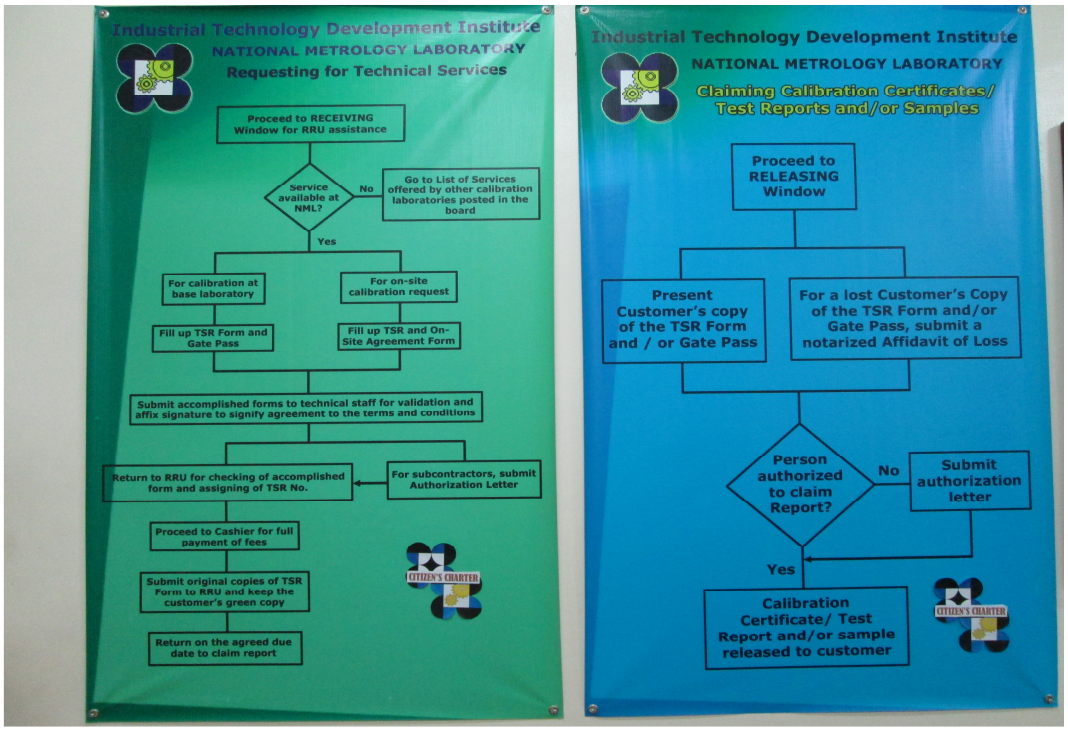
FRONTLINE SERVICES

Standards and Testing Laboratory



FRONTLINE SERVICES

National Metrology Laboratory



ITDI CUSTOMER SATISFACTION SURVEY FORM

Reference Number

Republic of the Philippines
Department of Science and Technology
INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
DOST Compound, Gen. Santos Ave., Bicutan, Taguig City
Tel. Nos. 837-2071 to 82; Tele-fax Nos.: 837-3167; 837-6150
http://www.itdi.dost.gov.ph

CUSTOMER SATISFACTION SURVEY FORM

Kindly provide us with an honest evaluation of the services received from ITDI and its staff in order to serve you better in the future:

1. Name of Company/School: _____
2. ITDI Services rendered:
   ( ) Information ( ) Training Coordination
   ( ) Technical Assistance ( ) Project Monitoring
   ( ) R&D pls. specify _____ ( ) Others _____
3. Please rate the overall performance of ITDI services by checking the number that best expresses the following criteria:

	5	4	3	2	1
a. Quality of Results (reliable, accurate, relevant)					
b. Timeliness of Result/s					
c. Staff/Researcher (competent, courteous, etc.)					
Overall rating:					

5 - Outstanding 4 - Very Satisfactory 3 - Satisfactory 2 - Fair 1 - Poor

4. Comments/suggestions on how to improve our services:

_____
_____
_____
_____

_____ Date _____ Signature

Form: **QMS-F2**
Issue: Nov. 2011