



Briefing Session on
Outsourcing of
Food Tests:
Review and Way Forward

**Government Laboratory
October 2012**



Review of Outsourcing Contracts in 2012-13



Outsourcing in 2012-13

- ✦ 17 contracts issued by end of Oct 12
 - ✦ total about 118 500 tests
 - ✦ contract period: 3 months to 1 year
 - ✦ exercise ends in March 2013
- ✦ Food additives
 - ✦ general foodstuff, beverages, preserved fruits and vegetables
- ✦ Heavy metals /Toxic element in general foodstuff
- ✦ Pesticides in fruits and vegetables
- ✦ Other contaminants in foodstuff



Salient Points (1)

- ✦ Accredited in corresponding tests
 - ✦ maintaining accreditation status throughout contract period
- ✦ Test sample collection
 - ✦ within specified time after notice
 - ✦ Government Laboratory (GL) Headquarters at Homantin
- ✦ Report results within specified period



Salient Points (2)

- ✦ Retention of remaining test samples
- ✦ Past performance will be taken into account when future tender quotations are evaluated



Issued Contracts (Food Additives) (1)

★ Sulphur dioxide and other preservatives

- ★ 4 contracts on general food and specific foods
- ★ SO₂, benzoic acid, sorbic acid, parabens with / without salicylic acid
- ★ about 3 100 samples
- ★ reporting limits: 8 mg/kg for SO₂, 30 mg/kg for parabens and 50 mg/kg for others



Issued Contracts (Food Additives) (2)

✦ Nitrate/Nitrite

- ✦ 1 short-term contract on meat and dairy products
- ✦ about 520 samples
- ✦ reporting limits: 5 mg/kg for nitrite (as NaNO_2) and 30 mg/kg for nitrate (as NaNO_3)

✦ Propionic acid

- ✦ 1 short term contract on flour confectionary
- ✦ about 260 samples
- ✦ reporting limit: 50 mg/kg



Issued Contracts (Pesticides) (1)

- ✦ **Organochlorine (OC) pesticide residues in fruits and vegetables**
 - ✦ 1 contract on 35 OC pesticides
 - ✦ about 700 samples
 - ✦ reporting limits: 0.01 mg/kg each
- ✦ **Organophosphorus (OP) pesticide residues in fruits and vegetables**
 - ✦ 1 contract on 42 OP pesticides
 - ✦ about 700 samples
 - ✦ reporting limits: 0.1 mg/kg each



Issued Contracts (Pesticides) (2)

★ Pyrethroid residues in fruits and vegetables

- ★ 1 contract on 8 pyrethroids
- ★ about 700 samples
- ★ reporting limits: 0.1 mg/kg each

★ N-methyl carbamate residues in fruits and vegetables

- ★ 1 contract on 16 carbamates
- ★ about 700 samples
- ★ reporting limits: 0.1 mg/kg each

Issued Contracts (Veterinary Drug Residues)

★ Chloramphenicol

- 1 contract for meat and aquatic products
- about 430 samples
- reporting limit: 0.3 $\mu\text{g}/\text{kg}$

★ Malachite Green

- 1 contract for aquatic products
- Malachite Green and Leucomalachite Green
- about 360 samples
- reporting limit: Sum of MG and LMG: 2 $\mu\text{g}/\text{kg}$



Issued Contracts (Heavy Metals / Toxic element)

✦ 7 Heavy metals / Toxic element

- ✦ 1 contract for Sb, As, Cd, Cr, Pb, Hg and Sn in miscellaneous foods
- ✦ About 1 800 samples
- ✦ reporting limits: 0.02 mg/kg – 10 mg/kg

✦ 4 Heavy metals / Toxic element

- ✦ 1 contract for As, Pb, Hg, and Sn in general foodstuff
- ✦ About 1 350 samples
- ✦ reporting limits: 0.03 mg/kg – 10 mg/kg



Issued Contracts (Other Contaminants)

★ Sudan Dyes

- 1 contract on general food products
- Sudan I, II, III, IV, Sudan Orange G, Sudan Red 7B, Dimethyl Yellow
- about 900 samples
- reporting limits: 20 $\mu\text{g}/\text{kg}$ each

★ Melamine

- 1 contract on general food
- about 1 100 samples
- reporting limit: 1 mg/kg



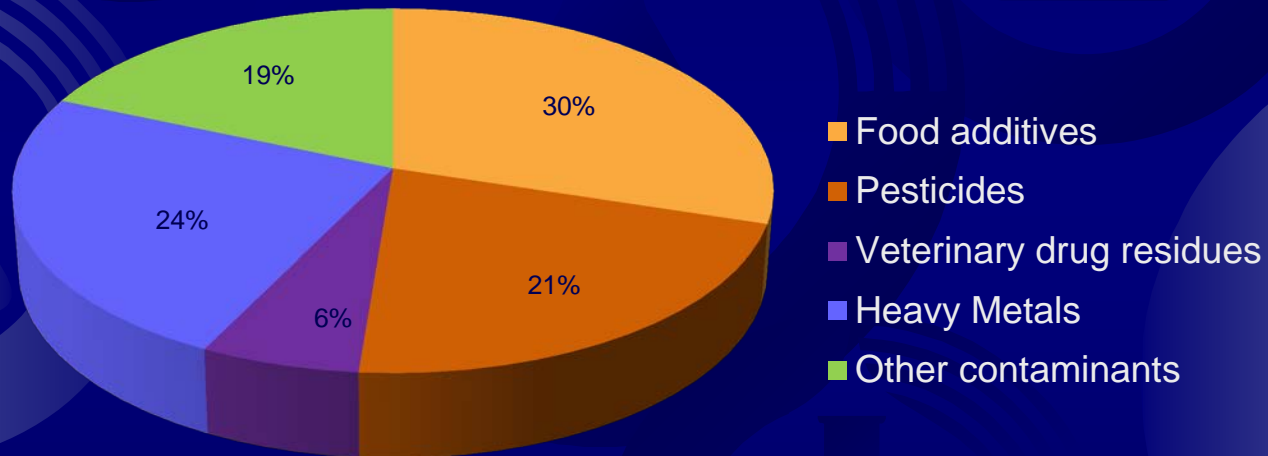
Issued Contracts (Other Contaminants)

✦ Boric acid

- ✦ 1 short term contract on general food
- ✦ about 410 samples
- ✦ reporting limit: 50 mg/kg



Sample Distribution

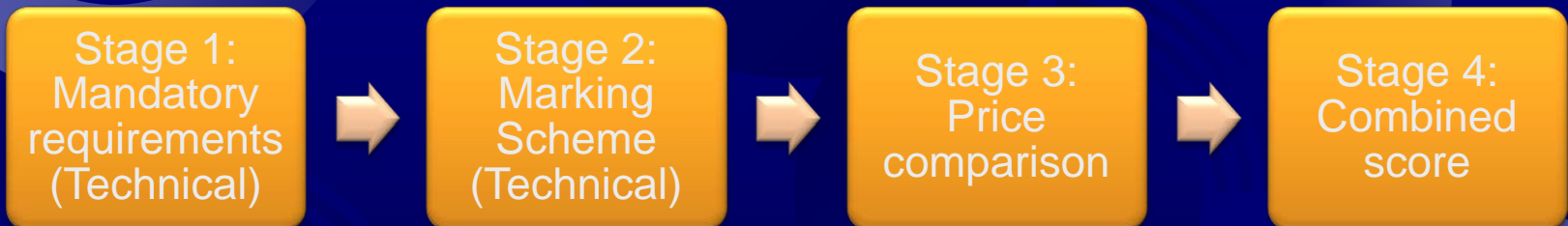




Invitation to Quotation

★ Two-envelope system

- Introduced for contracts commencing in Oct 2011
- Technical proposal
- Price proposal
- 30% Technical weighting / 70% Price weighting
- Evaluation process:





Way Forward:
Outsourcing Contracts
in 2013-14



Outsourcing Contracts in 2013-14 (1)

- ✦ Around [120 000] tests
- ✦ Some contracts will start in April 2013
 - ✦ invitation for quotation will start in February 2013
- ✦ Contract period varies
 - ✦ one year
 - ✦ half year
 - ✦ short-term contracts about 3 - 4 months



Outsourcing Contracts in 2013-14 (2)

★ Two-envelope system for invitation to quotation

- ★ [40%] technical weighting / [60%] price weighting
- ★ [past performance in previous contracts with GL]
- ★ [Preferred techniques]



Outsourcing: Test Areas

- ✦ Food additives
- ✦ Pesticide residues
- ✦ Veterinary drug residues
- ✦ Heavy metals / toxic element
- ✦ Other contaminants
- ✦ [Toxins]
- ✦ [Nutrition labelling]



General Requirements

- ★ Accredited in the corresponding tests
 - maintaining the accreditation status throughout the contract period
- ★ Test sample collection
 - within specified time after notice
 - at specified locations
- ★ Report results within specified period
- ★ Retention / return of remaining test samples



Contracts on Additives (1)

- ★ SO₂ and other preservatives in general foodstuff (~[2,300] samples – [2] contracts)
 - ★ SO₂; benzoic, sorbic and salicylic acids; and parabens
 - ★ reporting limit: 8 mg/kg for SO₂, 30 mg/kg for each of the parabens and 50 mg/kg for each of the others
- ★ Short-term contracts on preservatives (~[300 – 500] samples per project)
 - ★ in specific foods such as beverages, preserved fruits and vegetables
 - ★ SO₂; benzoic and sorbic acids; parabens



Contracts on Additives (2)

- ✦ Propionic acid in flour confectionary (~[260] samples)
 - ✦ reporting limit: 50 mg/kg
- ✦ Nitrate / nitrite in meat and dairy products (~[520] samples)
 - ✦ reporting limit: 30 mg/kg as NaNO_3 and 5 mg/kg as NaNO_2



Contracts on Pesticide Residues (1)

- ✦ **Organochlorine pesticides [×35] (~[700] samples)**
 - fruits and vegetables / general foodstuff
 - reporting limit: 0.01 mg/kg each
- ✦ **Organophosphorus pesticides [×42] (~[700] samples)**
 - fruits and vegetables / general foodstuff
 - reporting limit: 0.1 mg/kg each
- ✦ **Pyrethroids [×8] (~[700] samples)**
 - fruits and vegetables / general foodstuff
 - reporting limit: 0.1 mg/kg each
- ✦ **N-Methyl carbamates [×16] (~[700] samples)**
 - fruits and vegetables / general foodstuff
 - reporting limit: 0.1 mg/kg each



Contracts on Pesticide Residues (2)

- ✦ Test parameters: refer to

- ✦ <http://www.govtlab.gov.hk/english/development.htm>

- ✦ Potential new test parameters:

- ✦ “Pesticide Residues in Food Regulation” under Centre for Food Safety website



Contracts on Veterinary Drug Residues

- ✦ Chloramphenicol in meat and aquatic products (~[430] samples)
 - ✦ reporting limit: 0.3 $\mu\text{g}/\text{kg}$
- ✦ Malachite green in aquatic products (~[360] samples)
 - ✦ reporting limit: 2 $\mu\text{g}/\text{kg}$ for sum of malachite green (MG) and leucomalachite green (LMG)



Contracts on Contaminants

- ★ Sudan dyes in general foodstuff (~[900] samples)
 - ★ Sudan I, II, III, IV, Sudan Orange G, Sudan Red 7B and Dimethyl Yellow
 - ★ reporting limit : 20 $\mu\text{g}/\text{kg}$ each
- ★ Melamine in general foodstuff (~[1 100] samples)
 - ★ reporting limit: 1 mg/kg
- ★ Boric acid in general foodstuff (~[400] samples)
 - ★ reporting limit: 50 mg/kg



[Toxins]

- ✦ Aflatoxins B₁, B₂, G₁, G₂ in nuts, cereals and products
 - ✦ reporting limit: 2 ppb or better for total aflatoxins (B₁, B₂, G₁, G₂)
 - ✦ with confirmation
- ✦ Aflatoxin M₁ in milk
 - ✦ reporting limit: 0.01 ppb
 - ✦ with confirmation



[Nutrition Labelling]

- ✦ Prepackaged general foodstuff
- ✦ 7+1 nutrients
 - ✦ energy, protein, total fat, saturated fat, trans fat, carbohydrates, sugars, sodium
- ✦ Guidance notes issued by CFS
 - ✦ *Technical Guidance Notes on Nutrition Labelling and Nutrition Claims*



Proficiency test (PT) programme

★ PT programme

- ★ Boric acid in food
- ★ By the end of 2012



Thank You