ANNEX-F

PROTOCOL FOR CASE DEFINITION AND MANAGEMENT

1. **Pigmentation Changes** *(any of the following)*
   a) Fine-freckled or spotted pattern on trunk and extremities;
   b) Rounded hypo pigmented or de-pigmented mauls on a normal or hyper pigmented background (raindrop pigmentation leukomelanosis);
   c) Diffuse generalized hyper pigmentation;
   d) Localized or patchy pigmentation especially at palm and sole skin folds or areolar region (less common);
   e) Pigmentation of mucous membrane (e.g. oral mucosa), usually in combination with other changes listed above less common.

2. **Hyper Keratoses** *(can be further subcategorized as follows):*
   a) Mild-slight thickening or minute papules (less than 2mm) of the palms and soles, often associated with a grit like texture, that may be primarily detectable by palpation;
   b) Moderate multiple raised keratoses appearing mainly or exclusively in a symmetric distribution on the palm and soles;
   c) Severe-large discrete or confluent keratotic elevation on the palm and soles with nodular wart like or horny appearance. Less commonly there may also be involvement of the dorsum of the extremities and the truck;
   d) Diffuse thickening of the palm and soles may occur alone or in combination with the keratoses nodules.

3. **Bowen's Disease** *(in situ Squamous Cell Carcinoma or Intra Epidermal Carcinoma)*

   May appear as multiple mauls papule or plaque in non-sun exposed areas, usually a scaly, crusted erythematous plaque. They are usually sharply demarcated. Seldom indurate in shape. If crust is removed the underlying surface may be reds and oozing.
Flow Chart For Diagnosis Of Arsenicosis

1. Characteristic manifestations of other poisons/conditions?
   - Yes
     - Suspected case
   - No
     - History of chronic arsenic exposure >> Arsenite

2. History of chronic arsenic exposure >> Arsenite
   - Yes
     - Probable case
     - Presence of other arsenic's clinical or histological evidence
       - Yes
         - Clinically & Laboratory: Confirmed case
       - No
         - Not a case
   - No
     - Suspected case
     - Presence of other arsenic's clinical or histological evidence
       - Yes
         - Clinically & Laboratory: Confirmed case
       - No
         - Suspected case

3. Uncertain circumstances
   - Yes
     - Probable case
     - Presence of other arsenic's clinical or histological evidence
       - Yes
         - Clinically & Laboratory: Confirmed case
       - No
         - Not a case
   - No
     - Suspected case
     - Presence of other arsenic's clinical or histological evidence
       - Yes
         - Clinically & Laboratory: Confirmed case
       - No
         - Suspected case
4. Management

Standard medical practice by surgery, cryo-surgery or other available management facilities.

Case Definition Table: Laboratory Test For Establishing Exposure History Of Arsenicosis Cases

A positive exposure history is established by:

Either Testing Water

Consumption of drinking water with an arsenic Concentration in excess Of Drevailing national standards for at least 6 months. The arsenic concentration should be determined using a validated method performed by trained personnel in a laboratory meeting national standards and practicing standards operating procedures.

Or Testing Biomarker

If data on the arsenic concentration of previously consumed water is unavailable, an elevated concentration of arsenic in hair (>0.8 mg/kg) or in nail clipping (> 1.3 mg/kg) may serve as presumptive evidence of elevated arsenic exposure using a validated method performed by trained trained personnel in a laboratory meeting national standard and practicing operating procedures.