**Appendix A.II.2.2.9-f**

**USERS INTERPRETATION GUIDE FOR NON-NUCLEAR ATMOSPHERIC TRANSPORT and Dispersion MODELLING PRODUCTS PROVIDED BY RSMCs**

The designated Centres will make available in WMO TD-778 on the WMO Emergency Response Activities web site an interpretation guide for users.

General rules for displaying results

In order to make the interpretation of the maps easier, the producing centres should adopt the following guidelines:

General guidelines for all maps:

1. Provide labelled latitude and longitude lines at regular intervals and sufficient geographic map background (shore lines, country borders, rivers, etc. and possibly roads and town names for localised events) to be able to locate precisely the trajectories and contours;
2. Indicate the source location with a highly visible symbol (▲, ●, ◼, etc.);
3. Indicate the source location in decimal degrees (latitude – N or S specified, longitude – E or W specified, plotting symbol used), date/time of release (UTC), and the meteorological model initialization date/time (UTC);
4. Each set of maps should be uniquely identified by at least product issue date and time (UTC) and issuing centre;
5. Previously transmitted products from the dispersion model need not be retransmitted;
6. Indicate with a legend if this is an exercise or requested services.

Specific guidelines for concentration maps:

1. Adopt a maximum of five concentration contours ;
2. A legend should indicate contours used on the chart;
3. Contours may be colour-filled but should be clearly distinguishable from map background lines;
4. Indicate the following input characteristics: (i) source assumption (height, duration, pollutant type, amount released); (ii) the units of concentration. In addition, charts should specify: (i) “surface to xxx-m layer concentrations”, where xxx depends on the pollutant type, and if the default source is used; (ii) “Results based on default initial values”;
5. Indicate, if possible, the location of the maximum concentration with a symbol on the map and include a legend indicating the symbol used and the maximum numerical value;
6. Indicate the starting and ending date/time (UTC).

Specific guidelines for backtrajectory maps:

1. Distinguish each trajectory (levels chosen will depend on specifics of the event or the request) with a symbol (▲, ●, ◼, etc.) at synoptic hours (UTC);
2. Use solid lines (darker than map background lines) for each trajectory;

Provide a time-height (m or hPa) diagram, preferably directly below the trajectory map, to indicate vertical movement of trajectory parcels.

The RSMCs will distribute their standard products to the NMHS Operational Contact Points by e-mail or retrieval from RSMCs password protected designated Web site. Standard products in the ITU-T T4 format suitable for both group 3 facsimile machines by exception and only if requested by the NMHS Operational Contact Point. The RSMC may also make use of other appropriate technologies.