SURFACE HEAT EXCHANGE COEFFICIENT ($W/m^2, ^oC$)
Values for a lightly heated, natural water surface
(local excess temperatures 0 to 3 ^oC)

Ambient Water Temp. (^oC)	Wind Speed (m/s) 0	1	2	4	6	8
5	5	10	14	24	33	42
10	5	11	16	27	38	49
15	5	12	18	31	44	59
20	5	14	21	38	52	68
25	6	16	25	45	63	82
30	6	19	30	54	76	100

Ref: "Heat Disposal in the Water Environment", E.E. Adams, D.R.F. Harleman, G.H. Jirka, and K.D. Stolzenbach, Course Notes, R.M. Parsons Laboratory, Mass. Inst. of Techn., 1981.

If no pollutant data at all is available, it is most convenient to specify C0 = 100 %.

In case of an **ambient background concentration** it is important to treat all pollutant related data items in a consistent fashion. This includes the specification of any regulatory values as discussed in Section 4.8 below.

Example: suppose the actual discharge concentration for a particular pollutant is 100 mg/l, and values of CMC and CCC for the pollutant are 20 mg/l and 10 mg/l, respectively. If the background ambient concentration for the same pollutant is 4 mg/l, the data entry to CORMIX would be for the discharge concentration = 96 mg/l, for CMC = 16 mg/l, and for CCC = 6 mg/l, respectively. All concentration values listed in the diverse CORMIX output (see Chapter V) must then be interpreted accordingly, and the actual concentration values are computed by adding the background concentration value. E.g. if the CORMIX predicted value for one particular point happens to be 13.6 mg/l, then the total concentration value at that point would be 17.6 mg/l. Also, all program mixing zone messages would occur at correct regulatory concentrations because they are interpreted as excess plume concentrations above ambient.

4.8 Mixing Zone Data

The user must indicate: (a) whether EPA's toxic dilution zone (TDZ) definitions apply, (b) whether an ambient water quality standard exists, (c) whether a regulatory mixing zone (RMZ) definition exists, (d) the spatial region of interest (ROI) over which information is desired, and (e) number of locations (i.e. "grid intervals") in the ROI to display output details. Depending on the responses to the above, several additional data entries may be necessary as described in the following paragraphs.

When TDZ definitions apply, the user must also indicate the criterion maximum concentration (CMC) and criterion continuous concentration (CCC) which are intended to protect aquatic life from acute and chronic effects, respectively. CORMIX will check for compliance with: (a) the CMC standard at the edge of the TDZ and (b) the CMC standard at the edge of the RMZ, proving a RMZ was defined. See Subsection 2.2.2 for additional discussion.