## 4. Phase three

Three types of plants may reach inspection phase three:

Plants showing verification anomalies in the first two inspection phases, such as
- detected residues of prohibited chemicals;
- detected traces of plant modification prior to the inspection;

and plants being assessed by the inspection team as immediate and high risk to the objectives of the convention.

In the first case, i.e. in case that prohibited chemicals were in fact detected (most probably at trace level), the following steps may be considered for phase-3 inspection activities:

- sampling for off-site confirmation analysis, preferably using mass spectrometry (it is assumed that a positive on-site analysis would be backed up by a double and a blank test), for samples taken at the same and additional sampling points;
- the plant management and/or the representative of the national authority of the inspected state should be requested to provide an explanation (which should be recorded in the inspection report). To the extent possible, data in that statement should be verified as well.

In case that the inspection team considers the provided explanation insufficient, ambiguous, or otherwise unsatisfactory, and hence serious doubts arise as to whether or not a violation might in fact have taken place, the inspection team would decide to proceed to activities under phase four.

The second type of plant to consider is one where alterations were detected. Such alterations might have been:

- clean-out activities including decontamination;
- physical replacements of equipments in place.

For a typical industrial chemical plant, it seems reasonable to assume that an inspection team may face one of the following situations which would generate signals for the inspectors:

- plant under routine overhaul (i.e., non-producing)
- repair operations after accidents etc.
- routine clean-out to prepare for new production
- recently started new production cycle
- other routine maintenance operations

Given the time requirements of challenge inspections, it certainly will be possible to discriminate such