

chemicals which otherwise have rare or no application in the type of plant inspected.

- Assessment of the overall security regime at the plant, in order to identify or demonstrate the absence of security features irregular for industrial plants.

### 3.2. The actual conduct of the trial challenge inspection

The inspection was conducted at the end of march 1990. It had been preceded by a number of in-plant tests to validate analytical techniques. What follows is a concise account of inspection activities carried out, and results thus achieved.

The inspection team consisted of:

- 1 team leader
- 4 analytical chemists
- 1 chemical engineer

For real inspections, it was assumed that additional team members might become necessary (e.g., one more chemical engineer with experience in organophosphorous chemistry, two inspectors experienced in accounting, and several more team members to secure the site).

The plant was represented by the facility operator and a representative of the management of the chemical combine. In the exercise, representatives of the Ministry of Foreign Affairs and the Ministry of Disarmament and Defence participated as observers.

Several procedures and inspection elements of a challenge inspection were not actually conducted in the trial. The initial briefing was not in fact carried out in the actual trial itself, but was an element of the pre-inspection preparations to develop technical methods and concepts. The trial took one day, not counting pre-inspection activities.

#### 3.2.1. Analysis of environmental and other samples immediately after arrival at the plant

The team conducted a quick visual tour of the site and selected the following points for prompt analysis:

- Air samples: taken outside the plant building, inside the building, and close to reaction vessels, joints, temporary storage tanks, etc.;
- Wipe samples: taken from reactor surfaces close to valves, joints, and reactor in- and outlets

No IMS signals of the simulant used (or in fact of any other chemical listed under schedule 1) were detected in the samples. Proper functioning of the instrument was confirmed by parallel checks with insertion of a diffusion tube containing DIMP into the sampling pipe. The method applied for sampling had been validated beforehand in laboratory