Republic of Bulgaria
National Audit Office

Audit on Hazardous Medical Waste
(Performance audit, 2005)
Status at the beginning of the audited period:

- Insufficient capacity for treatment and disposal of the hazardous hospital waste;
- Hazardous hospital waste disinfected in autoclaves or incinerated in facilities that didn’t meet the environmental requirements;
- The only facility for pyrolytic incineration often braking down;
- Huge amounts of hazardous waste heaped and inadequately stored in hospitals.
Status at the end of the audited period:

- Sofia possesses hazardous hospital waste treatment facilities with a capacity of 3500 tonnes per year;
- Two pyrolytic incinerators are in use and adequate monitoring over emissions is in place;
- Alternative technologies for autoclave and microwave treatment of infectious waste are in use;
- The segregation of waste at the source is improved;
- Conditions for on-site storing of waste in healthcare facilities are also improved.
Main question

Is the management of hazardous medical waste in Sofia efficient?
AUDIT QUESTIONS

Do regulations, strategic and programming documents on the national level provide for safe and environmentally conscious management of hazardous medical waste?
AUDIT QUESTIONS (2)

- Is the management of hazardous medical waste in hospitals efficient (eco-friendly and safe) and effective?
- Do the operators carry out an ecological and safe treatment of medical waste?
AUDIT QUESTIONS (3)

- Is the Executive Environment Agency (EEA) effectively carrying out its regulatory, information, coordination and control functions effectively?
- Is the Regional Inspectorate on Environment and Water (RIEW) effective in its regulatory, information and control functions?
- Is the Hygiene Inspectorate's (HEI) ex-ante and on-going control effective?
Scope of the audit:

- Two ministries;
- One agency;
- Two control institutions;
- Five hospitals;
- One research centre;
- Two treatment facilities.
Basic data for audited hospitals:

- Number of patients (including out-patients) – 433,501 persons/y
- Total amount of generated hospital waste – 467 t/y;
- Amount of generated hazardous hospital waste – 0.652 kg/bed/daily;
- Weight of the disposed waste – 327 t/y;
- Number of employees handling hazardous hospital waste – 356 persons.
Methodology:

- Observations on hazardous healthcare waste management activities in hospitals and incineration facilities;
- Observation how the control checks are carried out;
- Structured questionnaires to all of auditees and other 20 hospitals;
- Interviews.
Challenges:

- Clear definition of hazardous healthcare waste;
- Development of comprehensive guidelines;
- Improvement of planning;
- Reduction of waste generation;
- Waste recycling and reuse;
Challenges (cont.):

- Efficient use of treatment facilities capacity;
- Sufficient and reliable information on the amount, composition and features of healthcare waste;
- Effectiveness of the controls.
Audit outcomes:

- Improvement of the waste at source segregation practices in healthcare facilities;
- Development of measures for improvement of conditions for proper on-site storing of hazardous waste in hospitals;
- Waste classification;
Audit outcomes (cont.):

- Improvement of accounting in hospitals and in waste treatment facilities;
- Better quality of the collected and generalized information on national level;
- Utilization of energy from waste incineration in one of the facilities;
- More secure work conditions.