Waste Management in Italy

SISTRI: THE NEW TRACEABILITY SYSTEM OF WASTE IN ITALY

Federico De Filippi, Ljubljana, 05th of June, 2013

www.sistri.it
SOGESCA: The Company

Sogesca was founded in 1986 to offer environmental consulting services to public institutions and industries and private companies. It is an engineering and consultancy company specialised in the energy and environmental sectors. It counts on different professional profiles: engineers, chemists, environmentalists, agronomists, architects, economists, social and political science experts.
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SISTRI: the Origin of the system

The SISTRI is an information system wanted by the Italian Ministry of Environment to monitor hazardous and non-hazardous waste’s traceability. The project started in 2009, in order to innovate and modernize the Public Administration, with the computerization of the industrial waste chain at a national level, and of the Campania Region’s urban waste.
The current procedure/ 1

• Waste holder has many obligations. Waste disposal or recovering can be managed by the holder himself or, in alternative, he can carry it out through private or public waste collector or authorized undertaking.

• Hazardous waste producers are obliged to report, yearly, data on waste quantities and categories to the National Waste Inventory. Waste information system is based on the National Waste Inventory

• All subjects involved in waste cycle (from production to disposal), shall report, every year, data about produced/managed waste by means of a compulsory questionnaire (MUD).
The current procedure/ 2

- Law provides also waste transporter’s obligations: all establishments or undertakings that collect and transport waste on a professional basis shall be registered in the National Register of Waste Management Enterprises. Such registration does indeed substitute the permit.

- During transport, waste must be accompanied by an appropriate identification document. Waste transporters are obliged to report, every year, to the authorities about managed waste quantities and categories.

- All establishments and undertakings carrying out waste recovery and disposal operations with the Law 152/06:
  - Must obtain a permit from the competent authorities;
  - Should keep a record of the quantity, nature, origin, destination, frequency of collection, mode of transport and treatment method;
  - Must report, every year, to the authorities about managed waste quantities and categories
The SISTRI is meant to simplify the existent paper process, which is not capable of giving information on the movement in real time, but only delayed data of often days or weeks.

The introduction of the computerized system would provide a number of benefits:

• Reducing the workload for all the companies operating in the waste chain (with almost the entire removal of paper documentation)

• Reduction of costs throughout the waste chain operators to comply with the existent regulations

• Fighting waste illegality and especially illegal dumping of waste

• To simplify the controls on the waste chain from the Italian Government supervisors.

This is the reason for the establishment of SISTRI, whose management was entrusted to the Carabinieri Corps for the environmental protection (NOE).
Subjects obliged to adhere

- Initial producers of hazardous waste
- Initial producers of non-hazardous waste (with over 10 employees)
- Campania Region (Municipalities, institutions, private companies)
- Waste dealers and brokers
- Consortiums
- Professional carriers
- Intermodal transport operators
- Transporters of their own produced hazardous waste
- Recovery and Disposal plants

Subjects with Optional adherence:
- Initial producers of non-hazardous waste (with less than 10 employees or farmers)
- Transporters of their own produced non-hazardous waste
By the establishment of Sistri, disposal facilities will be equipped with videosurveillance equipment and all users of the system, depending on the category, will acquire one or two electronic devices:

- a USB device already provided with a set of personal codes allowing a safe and easy access to the system:

- a true "black box" that must be installed on every transportation mean, and that allows to track the movement of waste transported at each stage of the trip.
What does it look like

http://www.sistri.it/Documenti/Allegati/GUIDA_RAPIDA_PRODUTTORI.pdf
The SISTRI form is divided into two areas:

- Chronological Register Area
- Waste Handling Area

The Chronological Register tracks the story of the material: charge & discharge of waste.

The manufacturing company should enter only at the first access the data of the production of waste in the Chronological register Area.
At a time when the subject (Producer, Transporter, Manager) moves the waste, the SISTRI - Handling Area form has to be filled as follows, exclusively with the data concerning the waste:

- **Producer:** number of packages, weight to be verified, transport subject to ADR (Accord Dangereuses Route), certificate (if required), presence of a broker/dealer, possible transport abroad, selection of the transporter and of the recipient;
- **Transporter:** mean of transport, driver, license plate, date of movement, location and possible intermodal transport;
- **Manager:** quantity received and accepted
SISTRI Form – Waste Handling Area

Is filled out during the handling of waste. Some fields are displayed automatically by the system basing on the Chronological registry data inserted previously. The system performs a check on input errors done by the user at the compiling time.
SISTRI FORM – Operative flow

The manufacturer places its USB device, gets authenticated and completes the fields of the Handling area: number of packages, weight to be verified, transport subject to ADR (Accord Dangereuses Route), certificate (if required), presence of a broker/dealer, possible transport abroad, selection of the transporter and of the recipient.

The transporter places its USB device, gets authenticated, recalls the data from the producer and fills its fields: mean, driver, license plate, date of movement, location and possible intermodal transport.

The driver arrives at the producer’s place, inserts its USB associated with the mean in the producer’s computer, authenticates and takes in charge the waste.

The producer prints a paper copy of SISTRI which will be signed by the driver and the producer. This copy will accompany the waste transport.

The recipient enters its USB device, gets authenticated, recalls the form and fills in its fields: Waste accepted and quantity received.

The driver inserts its USB device at the recipient, gets authenticated and sends the data related to transport.

Charge

Discharge
Trans boundary waste transport

From abroad to Italy:
• The authorized transporter must compile the module for the producer and for himself and signs
• Recipient: normal procedure

From Italy to abroad:
• The producer compiles the module, specifying transporter and final destination and signs
• The transporter plans the trip and signs
Information flow in the SISTRI
Thank you for your kind attention

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