

Waste Profile Name: Non-Radioactive Hazardous Waste Regulated by RCRA or TSCA and Non-Radioactive, Non-RCRA, Non-TSCA Regulated Industrial Waste

Page 1 of 5

Master Profile Number: HW-01-SC
Revision Number: Rev. 2
Effective Date: 10-08-2003

Material Description:

This profile is applicable to the following non-radioactive wastes:

- (1) Waste that is regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C "Hazardous Waste Management" and/or polychlorinated biphenyl (PCB) contaminated waste regulated by the Toxic Substances Control Act (TSCA).
- (2) Waste that is considered "non-regulated" under RCRA Subtitle C or TSCA but cannot be accepted into Oak Ridge Reservation (ORR) landfills (RCRA Subtitle D "State and Regional Solid Waste Plans") for disposal.
- (3) Waste may have one or more of the following EPA waste codes associated with it:
D001-D043, F001-F012, F019-F026, F028, F032, F034-F035, F037-F039, K001-K011, K013-K052, K060-K062, K064-K066, K069, K071, K073, K083-K088, K090-K091, K093-K118, K123-K126, K131-K132, K136, K141, K156-K161, P001-P018, P020-P024, P026-P031, P033-P034, P036-P051, P054, P056-P060, P062-P078, P081-P082, P084-P085, P087-P089, P092-P099, P101-P106, P108-P116, P118-P123, P127-P128, P185, P188-P192, P194, P196-P199, P201-P205, U001-U012, U014-U033, U035-U039, U041-U053, U055-U064, U066-U099, U101-U103, U105-U138, U140-U174, U176-U194, U196-U197, U200-U211, U213-U223, U225-U228, U234-U240, U243-U244, U246-U249, U271, U277-U280, U328, U353, U359, U364-U367, U372-U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, U409-U411
- (4) Waste that is shock sensitive, highly reactive will be evaluated on a case by case basis prior to acceptance under this profile. Evaluation for acceptance will be based on the commercial Treatment, Storage, Disposal Facilities' (TSDF) WAC and their ability to accept the material for treatment and disposal.
- (5) Waste that has a known history for forming peroxides (identified from manufacturers MSDS, list of [peroxide forming compounds](#), or LWS/Generator knowledge of material) and has been tested to confirm peroxide levels < 100 ppm. Materials containing peroxide levels between 10 and 100 ppm shall be stabilized and retested prior to acceptance.
- (6) Waste that is known to contain naturally occurring radioactive material "[NORM](#)" (identified by Radiological Protection Organization, list of known NORM materials or LWS/Generator knowledge of material) and has been surveyed to confirm no readings above unrestricted release values as defined by the [SBMS Radiological Protection's Subject Area](#).

Waste Profile Name: Non-Radioactive Hazardous Waste Regulated by RCRA or TSCA and Non-Radioactive, Non-RCRA, Non-TSCA Regulated Industrial Waste

Page 2 of 5

Characterization Parameters and Methodology:

The generator shall provide all information to fully complete the UCN-2109 form sets data package and the following parameters for each container (final package) of waste if not required for completing the UCN-2109 form sets.

- Identify the waste and lab pack or container (waste may be individual vials, bottles, cans or other container within a larger container or the waste may be containerized in bulk quantity such as drum of spent degreaser) as certified non-radioactive, Attachment C, in accordance with UT-Battelle's DOE approved procedures for "No Added Radioactivity" for wastes,
- Identify whether the waste is classified waste,
- Identify the physical state of the waste (solid, liquid, gas, powder), NOTE: Powder is only required if the hazard is based on or increases due to the particle size (i.e., flammable metals, etc.).
- Identify the specific container type, size (weight and volume), and number,
- Identify any inner packaging and condition of packaging
- Identify and quantify regulated constituents [i.e., what makes the waste RCRA (including UHCs) and/ or TSCA],
- Identify Rec'id number of the applicable MSDS or a copy of the MSDS when it is not available electronically,
- EPA codes for the waste container, as applicable,
- RCRA start date [earliest start date for lab packs or containers (i.e., the date of generation for the oldest item in the lab pack or container noting that containers from a Satellite Accumulation Area are dated according to the requirements of 40 CFR 262.34(c)],
- PCB waste packages shall be labeled with the date of generation or with the date of generation for the oldest item placed in the package,
- PCB concentration (highest concentration for lab packs or container), as applicable,
- PCB source concentration (highest concentration for lab packs or container), as applicable,
- Where applicable, provide a statement that the LDR requirements are met for the waste allowing landfill disposal -alternatively the waste will be processed for acceptable treatment.

Waste Profile Name: Non-Radioactive Hazardous Waste Regulated by RCRA or TSCA and Non-Radioactive, Non-RCRA, Non-TSCA Regulated Industrial Waste

Page 3 of 5

In addition to the above general criteria, if the material is lab packed (i.e., the waste consist of small vials or bottles or cans of chemicals placed inside a container referenced as a lab pack and meeting Department of Transportation (DOT) requirements), the generator shall also attach to the UCN-2109 form set data package a listing for 100% of the items packed into the outside container (final package). This "packing list" shall provide the following information for each item within the package:

- Identify the item type, number, and weight/volume,
- Identify the physical state (solid, liquid, gas, powder) of each item within the lab pack, NOTE: Powder is only required if the hazard is based on or increases due to the particle size (i.e., flammable metals, etc.).
- Identify any inner packaging when DOT exemptions are utilized,
- Identify and quantify container tare weight/size and container type/condition,
- Identify and quantify all regulated constituents in the waste, as practical,
- Identify the applicable EPA codes for each item,
- Identify the UHC's present at the point of generation, as applicable, for each item.

Should analytical testing be utilized to determine a waste is regulated under RCRA or TSCA, samples taken shall be representative of the waste stream and shall be collected in accordance with the EPA-approved sampling protocols in the current collection of "Test Methods for Evaluating Solid Waste", EPA SW-846 or equivalent. Should process knowledge (PK) be used, then it shall be documented on the 2109 form or, alternatively, on the PK form.

Radiological Constituent Limitations:

All waste under this profile shall be certified and documented as no added radioactivity in accordance with the DOE approved "No Added Radioactivity" procedures for wastes. The following criteria/basis are acceptable for certification of no-radioactivity added: (1) based on origin within a Non-Radioactive Materials Management Area (NRMMA); or (2) process knowledge and surface measurements for sealed and unopened containers. Method (2) may include a statistical basis in obtaining or evaluating data. The method used and location of backup detail shall be specified in the UCN-2109 form set.

Physical Parameter Limitations:

Solids and liquids may not be packaged in the same container.

Incompatible (per MSDS and per DOT packing definitions) waste items shall not be packaged within the same lab packed container. For the purpose of this activity, incompatible is also defined as the ability of two or more chemicals that upon direct contact at standard atmospheric temperature and pressure conditions shall form shock sensitive or explosive mixtures.

Waste Profile Name: Non-Radioactive Hazardous Waste Regulated by RCRA or TSCA and Non-Radioactive, Non-RCRA, Non-TSCA Regulated Industrial Waste

Page 4 of 5

Prohibited Items:

- No radioactive waste as determined and/or regulated by DOE, DOT, Nuclear Regulatory Commission or an Agreement State.
- Leaking internal containers unless the outer container and contents are defined as the waste.
- Leaking external containers.
- Free liquids within the external container (reference to lab packed wastes only). All liquid wastes shall be containerized.
- Shock sensitive, highly reactive wastes that cannot be accepted for disposal due to the treatment facilities' WAC
- Infectious, biological, etiological or animal wastes which have not been previously autoclaved or treated.
- Wastes containing one or more of the following EPA waste codes: U034, K142-K145, K147-K151.
- Waste with peroxide test results equal to or exceeding 100 ppm
- NORM waste material surveyed and determined to contain radiological readings above unrestricted release values by the SBMS Radiological Protection's Subject Area.

Packaging Requirements:

- All packaging must meet DOT and EPA packaging requirements.
- All bulked materials must meet DOT regulations.
- Lab packed wastes must be packaged according to the requirements of DOT.
- Void space shall be minimized to the extent reasonably achievable.
- Each package shall be labeled per DOT, TSCA, and RCRA regulations.
- Absorbent/cushioning material as required under DOT for lab packs or combination packages shall be added to each container.

Waste Profile Name: Non-Radioactive Hazardous Waste Regulated by RCRA or TSCA and Non-Radioactive, Non-RCRA, Non-TSCA Regulated Industrial Waste

Page 5 of 5

Required Documentation:

- Completed and signed UCN-2109 form set (Waste Item Description (WID) with Attachment C, "RCRA and/or TSCA Waste" or Attachment Z, "Non-regulated Chemical Waste".
- A list of internal containers located within the package for each lab packed container that provides the information identified in the "Characterization Parameters and Methodology" section of this profile.
- Copies of applicable MSDSs if not electronically accessible.
- Documentation that the final package meets the no-radioactivity added program requirements.
- Completed process knowledge documentation and supporting analytical data, where applicable.