



WASTE MANAGEMENT

Integrated Water Services, Inc.
(the Company)



Purpose

The purpose of the integrated Water Services (the Company) waste management strategy is to provide guidance and requirements necessary for efficient, effective, and compliant waste management during construction and operations at the Company.

Scope

This procedure applies to all Company employees. When work is performed on a non-owned or operated site, the operator’s program shall take precedence, however, this document covers Company employees and subcontractors and shall be used on owned premises, or when a contractors program doesn’t exist or is less stringent.

Procedure

The Company Safety Director or other designated person in his or her absence is accountable for managing waste and disposition of waste generated at the work site.

Waste Estimation

Project wastes, trash, and/or scrap materials will be taken into consideration before work begins. The Company must estimate the waste that will be generated prior to work being performed so that the need for containers and waste removal, if necessary, can be determined.

Each site will utilize the following for planning of dumpster scheduling and total non-hazardous dry waste material. These figures do not include neither recycling nor waste minimization efforts and reflect no use of an incinerator. Dumpster figures are based on a 40 yard container and can be modified if another size is used by changing the table below.

SAMPLE ONLY - SOLID WASTE					
Number of Employees	10	25	35	50	100
Total Estimated Square Feet of Waste (@ 0.675 cu ft per person daily)					
Daily	7	17	24	34	68
Weekly	47	118	165	236	473
Monthly (4.33 wks)	205	511	716	1,023	2,046
Annual	2,455	6,138	8,593	12,276	24,551
Total Estimated Weight of Waste (@ 4lb per person daily)					
Daily	40	100	140	200	400
Weekly	280	700	980	1,400	2,800
Monthly (4.33 wks)	1,212	3,031	4,243	6,062	12,124
Annual	14,549	36,372	50,921	72,744	145,488
Number of Total Dumpster Fills 40 yard dumpster 7x8x22 = 1,232 square feet					
Daily	0.0	0.0	0.0	0.0	0.1
Weekly	0.0	0.1	0.1	0.2	0.4
Monthly (4.33 wks)	0.2	0.4	0.6	0.8	1.7
Annual	2.0	5.0	7.0	10.0	19.9

The Company must coordinate with the project site or owner to ensure proper disposal of waste or scrap materials.

The Company must ensure the owner client is aware of whether waste and scrap materials will be taken off site by Company or will be disposed of on the owner client’s site.

Waste Segregation

- Do not mix waste streams
- Only place waste in the designated container, satellite accumulation area (SAA), recyclable accumulation area (RAA), universal waste accumulation area (UWAA) or designated dumpster.



Recycling

Wastes should be recycled whenever practicable. The Company will encourage proper segregation of waste materials to ensure opportunities for reuse or recycling occurs at each work site. The collection of recycled material will reduce the total load on the environment. Bins of sufficient size must be lined with a plastic bag and clearly labeled for use.

Waste Handling Matrix

The Company Waste Handling Matrix will:

- Address safe practices related to the immediate storage and handling of waste, scrap, or leftover material.
- The handling, organization and storage of waste and scrap materials to minimize potential impact to the environment. Waste materials shall be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities receptacles must be covered to prevent dispersion of waste materials and to control the potential for runoff.

Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Aerosol Can Contents	Various jobs and shop	Puncturing of aerosol cans	Hazardous	As per manufacturer	As per manufacturer and State regs	Read SDS
Aerosol Cans	Various Locations	Painting, lubricants, cleaning	Non-Hazardous if aerosol can is empty	As per manufacturer	Place empty can into garbage or recycle product bin	Read SDS
Batteries (Alkaline)	Various Locations	Battery Failures	Universal Waste	As per manufacturer	Transport to approved site for recycling or disposal	Read SDS
Batteries (Lead Acid)	Various Locations	Battery Failures	Universal Waste	As per manufacturer SDS	Lead acid batteries are returned to the Vendor upon removal	Read SDS
Batteries (NiCad)	Various Locations	Battery Failures	Universal Waste	As per manufacturer SDS	Ship to approved site for recycling or disposal	Read SDS
Butane Torch Bottle	Various Locations	Bottle failure	Hazardous	As per manufacturer SDS	As per manufacturer and State regs	Read SDS
Cardboard/Office Paper	Various Locations	Shipping Boxes & Office Activities	Non-Hazardous	Place in RAA or UWAA	Recycle where facilities are available. Dispose in Universal Waste when recycle facilities are not available	



Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Computers Discarded	Offices	Replacement	Non-Hazardous	Place in RAA or UWAA	Ship to assigned site for recycling or disposal	
Diesel Filters-Used	Equipment Repair	Filter Changes	Non-Hazardous	RAA for drained and crushed used filters	Drain for 12 hrs., crush and incinerate in Smart Ash unit	Place metal in recycle metal dumpster
Diesel Rags	Various Locations	Mechanic activities	Non-Hazardous	As per subcontractor procedures	As per local regulations	
Drained Diesel	Equipment Repair	Draining diesel fuel and filters	Non-Hazardous when burned as off-Spec fuel	Place in "used oil" tank in the equipment repair shop and fab shop	Burned for energy recovery in clean burn multi-oil heating system	Have SDS available to workers
Empty Paint Cans	Various Locations	Painting activities	Non-Hazardous	Transport to nearest shop and collect for third party disposal	Ship to assigned site for recycling or disposal	Have SDS available to workers Paint cans must be RCRA empty
Fluorescent Light Ballast	Various Locations	Failure	Non-Hazardous unless they contain PCB's or DEHP	None	UWAA	Ballast will say on the label if it contains PCB's. See SDS
Fluorescent Light Bulbs	Shops, Office Areas	Bulb replacement	Universal Waste	Place bulbs in their original container in the UWAA in the shop area	Ship to designated site for recycling or disposal	Take measures not to break the bulbs during transfer to waste. Hand, Eye, and face protection
Glass	Various Locations	Replacement	Non-Hazardous	None	Place in UWAA dumpster	Protect hands, body, eyes, and face
Glycol Rags	Equipment Repair	Fluid Changes	Non-Hazardous	As per subcontractor procedures	As per subcontractor procedures	As per subcontractor procedures
Glycol-Used	Equipment Repair	Fluid Changes	Non-Hazardous	As per subcontractor procedures	Recycled as per subcontractor procedures	Have SDS available to workers Subcontractor to dispose of product
Hoses & Belts	Equipment Repair	Replacement	Non-Hazardous	Place UWAA dumpster	Place UWAA dumpster	Have SDS available to workers Drain all fluids from hoses



Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Metal Shavings/Cuttings	Equipment Repair	Fabricating activities	Excluded Hazardous if recycled	Placed in recycle metal dumpster or metal only RAA's	Ship to assigned site for recycling or disposal	Ensure there are no free-flowing cutting fluids present before disposal
Oil Filters-Used	Equipment Repair	Oil filter changes	Excluded Hazardous	As per subcontractor procedures	As per subcontractor procedures	As per subcontractor procedures
Oil-Used	Equipment Repair	Draining oil and filters	As per subcontractor procedures	As per subcontractor procedures	As per subcontractor procedures	Have SDS available to workers
Oily Waste (rags, absorbents)	Various Locations	Mechanic activities, equipment drips and leaks	Non-Hazardous	Oily waste rag WAA's lined w/clear bags w/yellow stripes.	Incinerated in Smart Ash unit	Have SDS available to workers
Paint Waste (rags, rollers, brushes, etc.)	Various Locations	Painting activities	As per subcontractor procedures	As per subcontractor procedures	As per subcontractor procedures	Have SDS available to workers
Parts Cleaner Rags	Equipment Repair	Cleaning parts	Non-Hazardous	As per subcontractor procedures	As per subcontractor procedures	Have SDS available to workers
Scrap Metal	Various Locations	Fabrication activities & house cleaning	Excluded Hazardous if recycled	Placed in recycle metal dumpster or metal only RAA's	Ship to assigned site for recycling or disposal	Eye Protection Gloves
Tires	Various Locations	Replacement	Non-Hazardous	UWAA	Ship to assigned site for recycling or disposal	As per subcontractor procedures
Toner Cartridges	Offices	Copiers, printers, fax machines	Non-Hazardous	Placed in original container in UWAA	Ship to assigned site for recycling or disposal	Verify toner is expended before disposal.
Wood Waste	Various Locations	Various activities and shipping pallets	Non-Hazardous	Store on the far back corner of the pad or in the dump truck box if available.	Ship to assigned site for recycling or disposal	Pallets are refurbished and recycled when possible



Storage Requirements

Company must ensure project related wastes are stored and maintained in an organized fashion to encourage proper disposal and minimize risks to employees. Proper waste receptacles must be provided for trash and materials that may be reused or recycled during a project.

PPE

Refer to the Personal Protective Equipment procedure and the Safety Data Sheets for PPE requirements.

Education and Training

Employees shall be instructed on managing waste generated at the work site and on the proper disposal method of wastes. Examples include:

- Instruction on the proper handling, storage and disposal of wastes and depending on the waste generated at the site to also include general instruction on disposal of non-hazardous wastes, trash or scrap materials. If wastes generated are classified as hazardous then employees shall be trained to ensure proper disposal and compliance with regulations. Where subcontractors are the generators of waste, the subcontractor must have a Waste Management Plan that meets regulatory requirements. Subcontractors must train their workers to the requirements of their Waste Management Plan.
- Minimization methods to reduce waste.
- Recycling methods and proper PPE to be utilized.