Dar Al Riyadh Insight #98
Reducing Waste in Construction

Dar Al Riyadh Insights reflect the knowledge and experience of our Board, executives and staff in leading and providing PMC, design and construction management services. Dar Al Riyadh believes in the importance of broadly sharing knowledge with our clients and staff to improve project outcomes for the benefit of the Kingdom of Saudi Arabia.

What are the Types of Construction Waste Encountered?

Construction waste consists of solid, liquid, and gaseous wastes. The wasted labor associated with low productivity is arguably another form of construction waste. This Insight, however, will only consider its impacts in generation of added construction waste.

The various waste steams can be characterized by their hazard levels. This drives a consideration of other factors related to initial material choices and how to capture, treat, and dispose of any hazardous residuals. Hazard levels are not further considered in this Executive Insight but are important design, procurement, and construction considerations.

The following table summarizes some of the types of construction waste encountered.

Types of Construction Waste		
Solid Waste	**Liquid Waste**	**Gaseous Waste**
Concrete	General site runoff (silt and/or potentially contaminated)	Diesel generator exhausts
Bricks	Fuel and chemical plumes from construction operations	Purging and other vented gas
Ceramics and tile	Dredge disposal (potentially contaminated) runoff	Industrial gas, especially greenhouse gas (GHG), released during construction operations
Wood		Vehicle emissions from onsite construction equipment
Insulation materials		Vehicle emissions associated with work force vehicles to, from, and onsite
Glass		Logistics chain emissions from handling and transport of the materials of construction
Plastic		
Ferrous metals		
Non-ferrous metals		

Types of Construction Waste		
Stone and clay		
Dredge waste		
Vegetation		
Rocks		
Asphalt		
Miscellaneous packaging not otherwise included above		