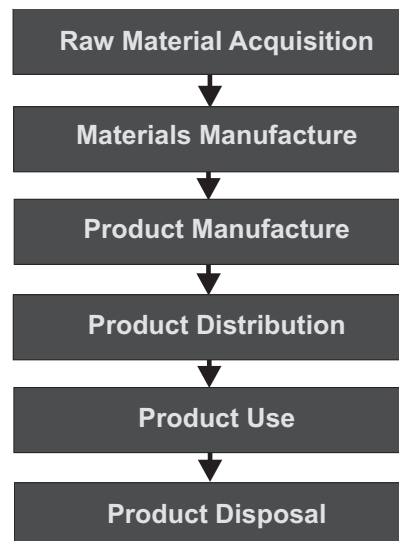


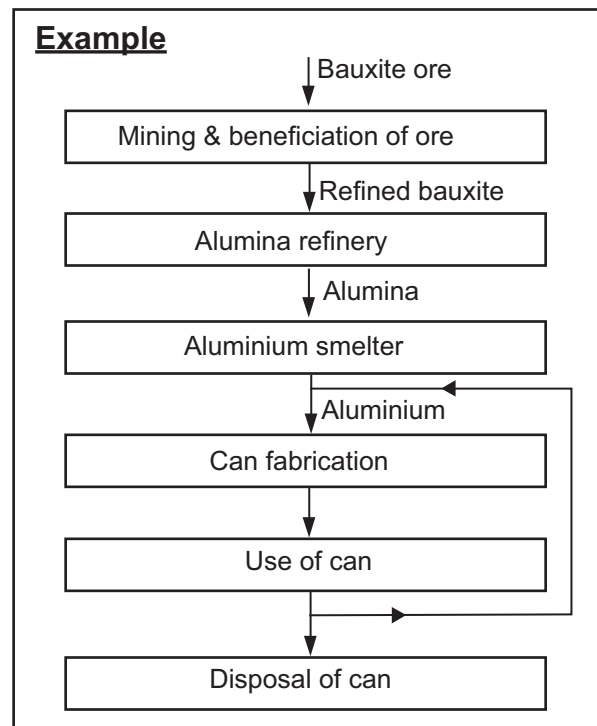
**FIGURE 2.1**

Key steps and sequence of the life cycle of a product. Brennan (2007): Reproduced with permission of John Wiley and Sons, Inc.



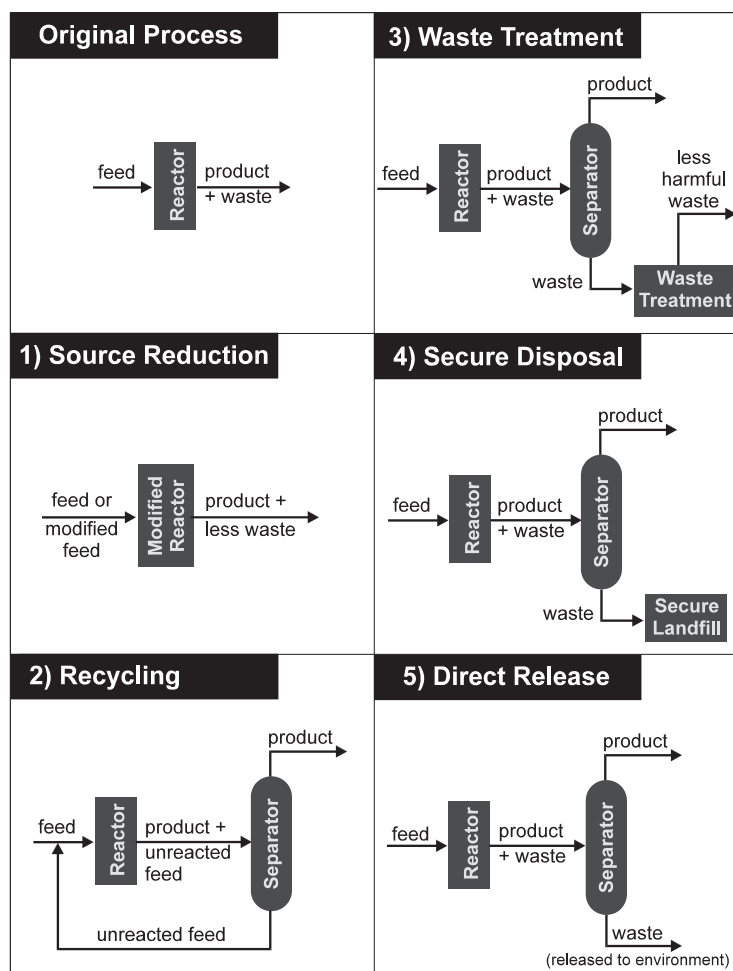
**FIGURE 2.2**

Product life cycle for an aluminium beverage can. Brennan (2007): Reproduced with permission of John Wiley and Sons, Inc.



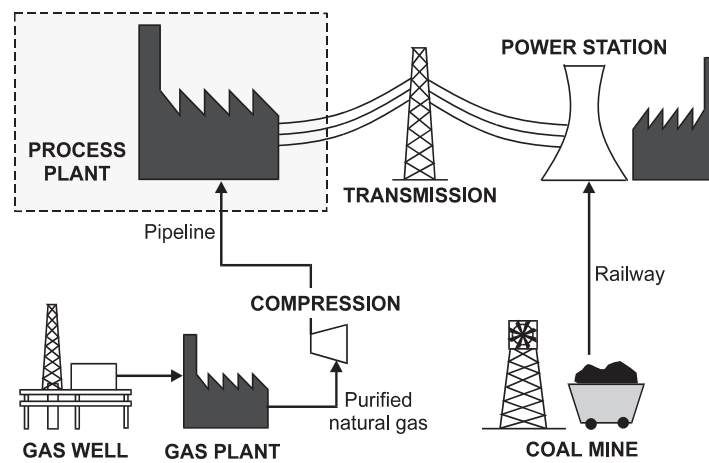
**FIGURE 2.3**

Waste management hierarchy in chemical processes. Adapted from Allen and Rosselot (1997): Reproduced by permission of John Wiley and sons Inc.



**FIGURE 2.4**

System boundary considerations for waste from utility systems supplying process plants. Brennan (2007): Reproduced with permission of John Wiley and Sons, Inc.



**FIGURE 2.5**

Some driving forces and obstacles in cleaner production initiatives.

