

## **Compost Process**

The compost facility utilizes three recyclable waste products to produce compost. The waste streams include yard debris (carbon feedstock), biosolids from Port Townsend's wastewater treatment facility, and biosolids from septic systems of Jefferson County (nitrogen feedstock). The entire conversion process of changing yard debris and biosolids into a safe and useable product takes about six months. The steps are listed below and are also shown in the process flow diagram.

- Yard debris is collected, shredded into small pieces, and stored at the Jefferson County Transfer Station site.
- The shredded yard debris is mixed with biosolids from the wastewater treatment facilities. These materials are blended to a recipe of three parts ground yard debris to one part biosolids.
- Blended compost is placed under a roof in aerated static piles. Air forced through the piles generates heat greater than 131°F for three days followed by fourteen days of 114 °F or higher. The process and heat kill pathogenic bacteria. Any odorous air is removed by use of a bio-filter.
- Compost is moved into static piles for curing and drying where microbial activity decreases. During the curing process compost is stabilized as microorganisms metabolize the remaining biosolids/yard debris mixture.
- During the screening process, large pieces of shredded yard debris (screenings) are removed and returned to compost mixing. The finer screened material remains in the compost product.
- Each pile of the finished product (about 500-1000 cubic yards) is sampled from three different areas in each compost pile. These samples are sent to a state-certified lab for analytical testing.
- Class "A" Exceptional Quality Compost becomes available for sale to the public when it demonstrates compliance with all federal and state standards.