

A Provençal Shit Lyric

*a marriage of tasks: Gay Science (Astrid, December)
& Shit (Eddie, January)*

There are around
eight million people
in New York City, and half
of this population, four million,
takes a dump each day.

Let's assume that each dump
consists of a half pound of solids.
That means that New York
City produces 2 million pounds,
or 1,000 tons, of shit each day.
My question is: after this 1,000 tons
of shit goes down the bowl,
where does it go? And what is
done with it after it gets there?

I. Faitz es lo vers totz a randa

Primary screens remove
the largest items in sewage.
They generally consist of large
bars spaced from 1 to 6 inches
apart to catch such items as
boards, rags, large plastic items,
sanitary pads, and condoms.

The screens are regularly
cleaned and the collected trash
is sent to a landfill.

II. Si que motz no y descapduelha

Secondary screens are often fine
meshes or moving mesh belts
with a much tighter spacing than
the primary screens. The finer material
they gather is also sent to a landfill.

III. E si m suy de midons lunhans

Sedimentation is the removal of suspended particles by allowing the water to either flow slowly through a large tank or rest for a time in settling basins or ponds.

Sometimes a chemical such as alum is added to the water to improve the efficiency of the settling process.

IV. Yes si m tira cum diamans

Flotation involves injecting air into the water in the form of tiny bubbles. Suspended particles that are too fine to settle will attach to the bubbles and rise to the surface of the water, where they can be skimmed off.

V. Si l reys engles el dux normans

Aerobic biological treatment is a process that uses bacteria that thrive in oxygen-containing air to break down some of the biological compounds in sewage, producing carbon dioxide and water.

To assist this process, sometimes the waste is aerated (has air injected into it).

VI. O vol, ieu la veirai, abans

Anaerobic biological treatment is sometimes used instead of or in conjunction with aerobic biological treatment—this process uses bacteria that thrive in

the absence of oxygen to break down the biological compounds in sewage.

The results of this process are methane, carbon dioxide, and other simple, organic compounds.

Anaerobic treatment is sometimes used when you want methane, e.g., for use as fuel, but generally the methane must be collected even if there isn't an end use for it.

VII. Que l'iverns nos sobreprenda

After these common treatments, additional filtering, chemical, and biological techniques can be used to give a final *polishing* to the water before it is discharged to the environment.

Despite all of these steps, some organic compounds and bacteria wind up in the environment.

However, most of the solid waste is collected as sludge during processing, and this sludge must be disposed of or things will quickly pile up.

Biosolids, as they are called, were once routinely landfilled or even dumped into the ocean.

With the advent of modern environmental regulation, this is no longer an option for many municipalities, so other methods of disposal have been developed.

For example, biosolids can be used for fertilizer, soil reclamation, and stabilization, and may even be dried out and burned as a solid fuel.

Let's look at New York City as a large-scale example.

New York residents and businesses discharge about 1.4 billion gallons of waste into the sewers each day,

which is treated by 14 sewage treatment plants. While no two treatment plants are exactly the same, they use similar techniques.

According to the City of New York Department of Environmental Protection (DEP), the North River treatment plant utilizes large bar screens, settling ponds, aeration and biological treatment, settling tanks, and treatment with sodium hypochlorite. The sludge that remains undergoes further settling, anaerobic digestion by bacteria, and dewatering to turn the sludge into biosolids.

DEP figures indicate that your guess of 1,000 tons per day is a little high—in fact New York generates about 1,200 tons of biosolids from all sources (human, food, plant, alligator, and other biological wastes).

This lovely fragrant mass was once dumped into the ocean, but since 1988 the city has been prohibited from doing this.

As a result, New York has developed a biosolids program that uses the final removed organics for such things as composting, fertilizer, and agricultural lime.