

Zequanox™ Product Development

Scientists at Marrone Bio Innovations purify, characterize, and identify the natural product compounds produced by the microbial strain in Zequanox™. By understanding these components, the company can determine proper application doses and develop quality control parameters so that every pound of product is consistent and reliable.



Various product formulations are tested for solubility and efficacy in laboratory jar tests. In the lab, the behavior of the mussels can also be observed as they ingest the different formulations.

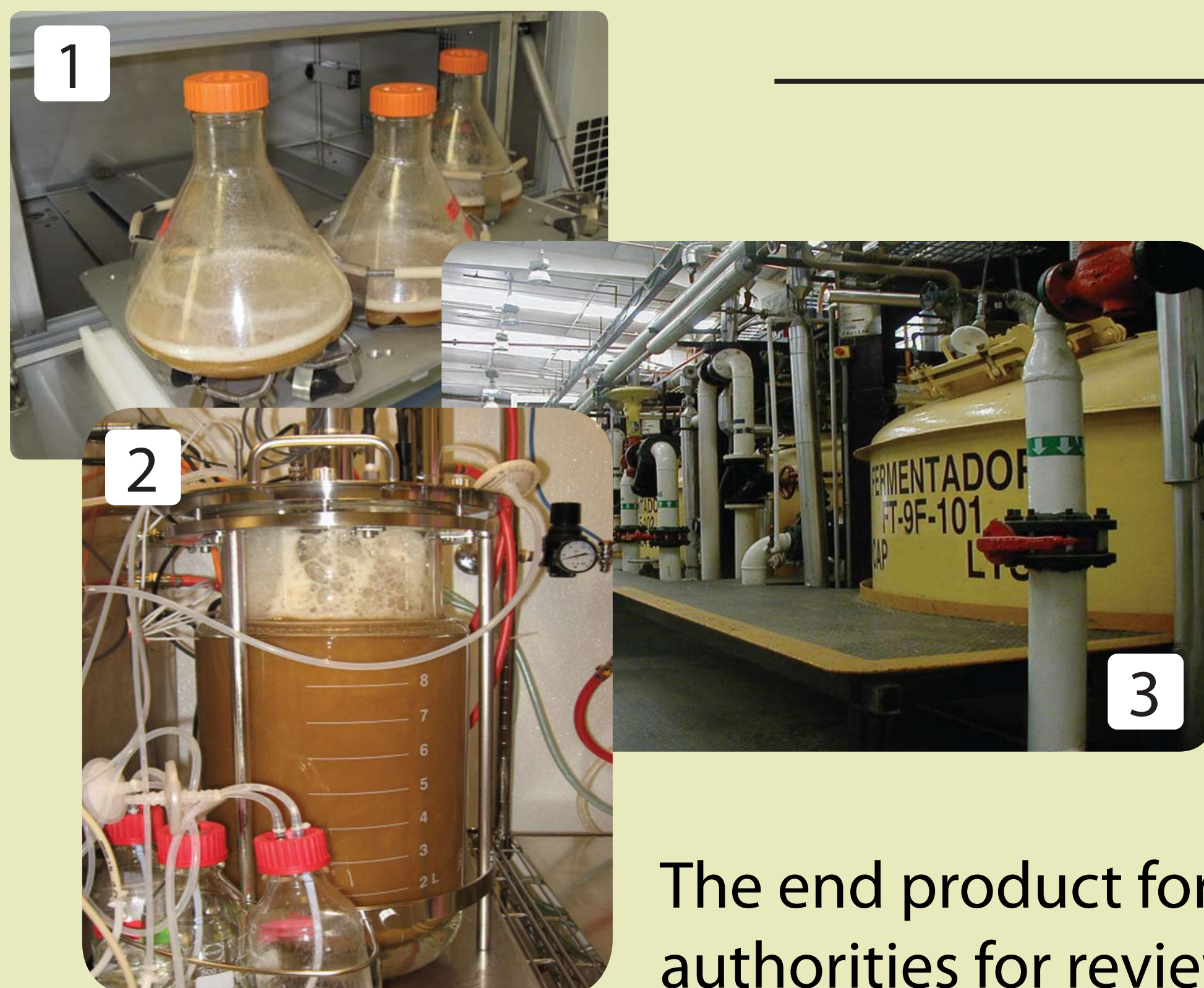


Bioboxes are larger systems used to simulate what takes place inside the pipes at a hydropower facility. The best formulations from the jar assays move to this stage, where they are tested at different concentrations and conditions.



Large scale trials at water treatment facilities are then conducted using refined formulations.

A product formulation that is effective, stable and user-friendly must be developed and packaged.



In order to produce a commercial product, fermentation scientists at Marrone Bio Innovations must gradually increase the production of the microbe from a small flask (1) to a pilot plant (2) and ultimately a full-scale manufacturing facility (3).

The end product formulation is then submitted to regulatory authorities for review and approval.