

# Theme Parks

## Business Scenario

Waveland is a popular water park that offers riveting visitor experiences tailored for domestic and international guests. Waveland is constantly adding new and exciting activities for its customers, therefore engaging in frequent R&D work.

In 2012, Waveland engaged in an R&D project with the main business objective being to develop an innovative technique to enable the effective and efficient preparation, installation and operation of the TwistTunnel water slide.

After establishing that the design and implementation of the TwistTunnel was innovative due to the unique design of the water slide, Waveland identified the specific activities that qualified as R&D.

## Waveland's Core R&D Activities:

Design and development of a series of prototypes to achieve the technical objectives (design of the TwistTunnel installation method).

Trials and analysis of data to achieve results that can be reproduced to a satisfactory standard and to test the hypothesis (testing of the TwistTunnel installation method).

Waveland developed the following hypothesis for this core activity:

**"It is feasible to design and develop an innovative technique to enable the effective and efficient preparation, installation and operation of the TwistTunnel water slide."**

Throughout this stage, Waveland designed and developed the foundation and infrastructure of the TwistTunnel implementation, as well as the TwistTunnel tube, trapdoor and maintenance entry points. It also prepared the installation site and equipment required for the procedure.

The hypothesis for this core activity was that the theoretical conclusions from the design phase could be realised through comprehensive analysis and valid testing.

Waveland concluded that the results were overall positive and did indeed prove the hypothesis. Waveland confirmed that it would use the new knowledge generated for further research and development work and would apply the concepts of the project to current and future jobs.



## Commentary

### Identifying Core R&D Activities

There are two types of core R&D activities:

1. Experimental activities whose outcome can not be determined in advance on the basis of current knowledge, information or experience, but can only be known by exercising a systematic progression of work that follows the principles of established science, proceeding from hypothesis to experiment, observation and evaluation, and lead to logical conclusions.
2. Experimental activities that are conducted for the purpose of creating new knowledge.

### Hypothesis Defined

AusIndustry recognises a hypothesis as a statement or proposition about what result is expected if certain conditions are put in place and certain actions are carried out in an experiment. It can range from an assumption or proposition to a theory, but it must establish the experimental activity and form part of a broader systematic progression of work undertaken by the company. It must be evident that the claimed experiment has been designed to test the hypothesis.

If the outcome of an activity can be obtained without a hypothesis, then the activity will not be considered R&D.

## Waveland's Supporting R&D Activities:

Background research to evaluate current knowledge gaps and determine feasibility (background research for the TwistTunnel installation method).

Waveland's background research included literature search and review, consultation with industry professionals and potential customers, and preliminary equipment and resources review.

These specific research activities were directly related to and supportive of the core R&D activities because they assisted in determining the fundamental elements of the research project.

Ongoing analysis of customer or user feedback to improve the prototype design (feedback R&D of the TwistTunnel installation method).

Waveland conducted the following:

- Ongoing analysis and testing to improve the efficiency and safety of the project
- Ongoing development and modification to interpret the experimental results and draw conclusions that served as starting points for the development of new hypotheses
- Commercial analysis and functionality review

These activities were directly related to Waveland's core activities because the feedback was needed to evaluate the performance capabilities of the new design in the field and to improve any flaws in the design.

## Commentary

### Identifying Supporting R&D Activities

Activities that do not form part of the core experimental activities may still be eligible as supporting R&D activities. Supporting R&D activities are directly related to an eligible core R&D activity. They must have been performed for the primary purpose of supporting a qualified R&D activity.

### What records and specific documentation did Waveland keep?

To meet the R&D Tax Incentive requirements, Waveland had to save documents that outlined what it did in its core R&D activities, including experimental activities and documents to prove that the work took place in a systematic manner. Waveland saved the following documentation:

- Project records/ lab notes
- Conceptual sketches
- Design drawings
- Photographs/ videos of various stages of build/ assembly/ testing
- Prototypes
- Testing protocols
- Results or records of analysis from testing/ trial runs
- Tax invoices

By having these records on file, Waveland confirmed that it was 'compliance ready' - meaning if it was audited by the ATO, it could present documentation to show the progression of its R&D activity, thereby proving its R&D eligibility.