

# 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, thus 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 would qualify for the Research and Experimentation Tax Credit. To be eligible, Waveland had to make sure that its "qualified research" met four main criteria, known and developed by Congress as the Four-Part Test. Waveland registered the following experimental activities.

## Waveland's Eligible 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's hypothesis for this R&D activity stated:

**"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, the TwistTunnel tube, trapdoor and maintenance entry points. It also prepared the installation site and equipment required for the procedure.

The hypothesis for this R&D experiment was that the theoretical conclusions from the design phase could be realized through comprehensive 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.



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 assisted in determining the fundamental elements of the research project, thus qualifying as R&D work.

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

Waveland conducted the following R&D activities:

- 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 R&D experiments were necessary to evaluate the performance capabilities of the new design in the field and to improve any flaws in the design.

## Commentary

### Qualified Research Defined

Qualified research consists of research for the intent of developing new or improved business components. A business component is defined as any product, process, technique, invention, formula, or computer software that the taxpayer intends to hold for sale, lease, license, or actual use in the taxpayer's trade or business.

## The Four-Part Test

Activities that are eligible for the R&D Credit are described in the "Four-Part Test" which must be met for the activity to qualify as R&D.

1. Permitted Purpose: The purpose of the activity or project must be to create new (or improve existing) functionality, performance, reliability, or quality of a business component.
2. Elimination of Uncertainty: The taxpayer must intend to discover information that would eliminate uncertainty concerning the development or improvement of the business component. Uncertainty exists if the information available to the taxpayer does not establish the capability of development or improvement, method of development or improvement, or the appropriateness of the business component's design.
3. Process of Experimentation: The taxpayer must undergo a systematic process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain at the beginning of the taxpayer's research activities.
4. Technological in Nature: The process of experimentation used to discover information must fundamentally rely on principles of hard science such as physical or biological sciences, chemistry, engineering, or computer science.

## What records and specific documentation did Waveland keep?

Similar to any tax credit or deduction, Waveland had to save documents that outlined what it did in its R&D activities, including experimental activities and business records 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 IRS, it could present documentation to show the progression of its R&D activity, therefore proving its R&D eligibility.