

# Enviro Tech Startup

## Business Scenario

Enviro Tech Startup was founded in 2016 to solve complex issues in the water industry, such as developing treatment projects for water and natural gas. Composed of environmental and energy industry professionals, Enviro Tech Startup commits to building and delivering the best-fit, high quality, and most cost-effective treatment programs.

During the development of its treatment programs, Enviro Tech Startup incurred qualified research expenses (QREs) but, having never claimed the R&D Tax credit before, the company did not know these activities were eligible. From meeting with an R&D tax specialist, Enviro Tech Startup learned these expenses could be claimed as part of the credit.

## Enviro Tech Startup Eligible R&D Activities:

With the assistance of an R&D Tax specialist, Enviro Tech Startup was able to identify its qualifying R&D activities. These QREs included:

- Developing and designing a more efficient and cost-effective process to remove impurities from natural gas
- Improvement of past treatment programs by increasing the use of automation and thereby eliminating the possibility of human error
- Conducting ongoing experiments to constantly improve existing treatment designs and eliminate technical uncertainty

From calculating the expenses incurred from labor, supplies, and contracted research, the R&D Tax specialist found that Enviro Tech Startup spent \$331,000. The company was eligible to claim about \$20,000 for the Federal Gross Credit and \$8,000 for the Texas Gross Credit.



## 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 Enviro Tech Startup keep?

Similar to any tax credit or deduction, Enviro Tech Startup had to save business records that outlined what it did in its R&D activities, including experimental activities and documents to prove that the work took place in a systematic manner.

These were the documents the company were able to save:

- Background research
- Project Records
- Design documents for system architecture and source code
- Conceptual sketches
- Design drawings
- Photographs
- Screenshots
- Testing protocols
- Results from trial runs
- Development plans
- Records of resource allocation

By having these records on file, Enviro Tech Startup 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 work.