# **CONTROL PRODUCTS®**

#### **Corporate Office**

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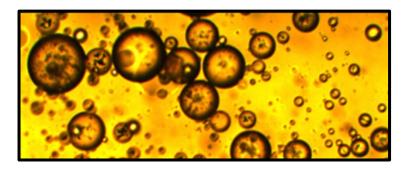


### Louisiana Office

Baton Rouge, LA 70810 T (573) 614-2788

#### **New Jersey Office**

Tinton Falls, NJ 07724 T (908) 581-6291



## **Statement of Qualifications**



#### STATEMENT OF QUALIFICATIONS

<u>Provectus (Latin)</u> = advanced; higher level of knowledge. Provectus Environmental Products, Inc. is a performance technology/chemistry provider to the soil and groundwater remediation industry. We specialize in the development and global commercialization of next-generation, synergistic *in situ* chemical (reduction and oxidation) and biological remedial technologies. Our proprietary technology portfolio represents the safest, most effective, and most cost-efficient solutions available to our industry.

We are not consultants. Our business model is to support responsible parties, environmental engineers, technical consultants, governmental regulators, and the wider academic community by providing technical evaluation, design and support of cost-effective, modern remediation strategies.

#### **Distinctive Environmental Biotechnologies**

The Provectus line of patented environmental remediation products is truly different, and it represents genuinely unique chemistries. They are not simply "me too" modifications of existing environmental technologies. As you review our technology portfolio, common features will be apparent: a clear focus on safety, tangible cost efficiencies, demonstrated effectiveness, distinguishable ease of use, and recognizable quality at the highest level.

- Provect-CH4<sup>®</sup> Methanogen Inhibitor and ERD/ISCR Supplement: Antimethanogenic reagents (AMR) that effectively control methane production when combined with various enhanced reductive dechlorination (ERD) amendments (*e.g.,* [emulsified] oils, lecithin, lactates, molasses, sugars, *etc*) or conventional *in situ* chemical reduction (ISCR) reagents that do not (and cannot) have antimethanogenic compounds.
- Provect-IR<sup>®</sup> Solid, Antimethanogenic ISCR Reagent: As a prime originator and developer of the original EHC® ISCR reagent *circa* 2003, scientists now at Provectus know that Provect-IR is a genuine improvement on the ISCR process and its older product formulations. Provect-IR is a much more efficient, cost effective and safer ISCR approach = can use an estimated 30% less amendment and achieve expected results.
- Provect-IRM<sup>®</sup> Solid, Antimethanogenic ISCR Reagent / Metal Stabilization Reagent: The Provect-IRM antimethanogenic technology core makes this a more effective means of metal immobilization/ISCR that minimizes production of methylmetal(loids) for safer, more effective, long-term immobilization.
- ERD-CH4<sup>™</sup> Ole Ego Liquid Antimethanogenic ISCR Reagent: The most cost-effective formulation of a liquid, antimethanogenic ERD amendment that can be applied via screened systems. By inhibiting methanogenesis using multiple AMRs, this is a more efficient (saves an estimated 30 to 50% of the carbon amendment), longer- acting and safer ERD approach.
- Provect-OX<sup>®</sup> Self-Activating ISCO/ Enhanced Bioremediation Reagent: Persulfate-based in situ chemical oxidation (ISCO) reagent that is unique in terms of its safety (no extreme activators; no heat generated) and effectiveness, as it actively integrates enhanced bioremediation as part of the overall treatment process – and is the only ISCO reagent designed to manage contaminant rebound. Uniquely buffered with Terr-OR<sup>™</sup> ferrate stabilizer.



- AquaGate<sup>®</sup>+CH4<sup>™</sup> Composite, Antimethanogenic Reactive Capping Technology: Developed in collaboration with AquaBlok, LTD subaqueous caps can be constructed more effectively by minimizing gas ebullition and contaminant methylation.
- ◆ EZVI-CH4<sup>™</sup> Antimethanogenic DNAPL Treatment: Unique product engineered under a license with NASA for safe and effective destruction of chlorinated solvent dense non-aqueous phase liquid (DNAPL) sources.
- ♦ Provect-GS<sup>TM</sup> NAPL Immobilization Technology: An aqueous solution of reagents developed in collaboration Beazer East, Inc. for *in situ* geophysicochemical immobilization (ISGI) of DNAPL sources.
- Provect-ABR™: A proprietary formulation of hydrophilic carbon sources + inorganic nutrients, vitamins, minerals and buffering agents to enhance biological processes to rapidly remove hydrocarbons and other contaminants from surface media.
- Provect-IR for Soil: A proprietary formulation of our Provect-IR amendment that enhances biological processes to rapidly remove pesticides, nitrogenous energetics and other contaminants from surface media.
- <u>Commodity Amendments</u>:
  - <u>Zero-Valent Iron (ZVI)</u>: Provectus has teamed with GMA Industries, Inc to offer ZVI to the global remediation industry. A wide range of ZVI particle sizes are available including coarse, fine and micro-scale for traditional applications and permeable reactive barriers.
  - Oxygen Release Substrate (ORS) and ORS-Sleeve™: Slow release mixture of proprietary amendments to provide a source of dissolved oxygen and inorganic nutrients that enhance the aerobic biodegradation of groundwater contaminants. Used to complement removal of source area (*e.g.*, placement within excavated area) or for well deployment (*e.g.*, existing morning/injection wells).
  - **ISCR Sleeve**<sup>™</sup>: Slow release mixture of fermentable carbon + zero-valent iron and other proprietary reagents that enhance the anaerobic biodegradation of groundwater contaminants. Used for well deployment (*e.g.*, existing morning/injection wells).



#### **Corporate Resources**

Provectus is a company designed to work. Our people harbor and display the personal characteristics, technical skills, and inherent professionalism upon which we are growing our company – all with a crisp focus on client appreciation.

- <u>Credible Technical Aptitude</u>: Highly qualified staff, including Ph.D. level scientists and others representing more than 150 cumulative years' experience with environmental biotechnology; inventors and developers of multiple physical, chemical and/or biological remediation technologies.
- <u>Technologies Yield Predictable, Reliable Performance</u>: Patented and patent-pending technologies. Guaranteed performance and other warranties offered in conjunction with strategic providers and partners.
- Responsive Customer Care and Service: Logistics with no surprises, no excuses, no frustration. User-friendly and cordial account management personnel.
- Quantifiable Client Value: Safer, more effective, more cost-efficient remedial actions. "Do it Right the First Time" - avoid problems associated with new and emerging regulations for methane in groundwater, soil gas, and indoor air.

#### **Flexible Contracting Options and Preferred Network**

Provectus offers variable and flexible contracting options that can be developed on a project-specific basis. Our contracting options will range from straightforward, product-specific agreements to team bids that include pay-for-performance (PFP) milestones that are based on specific remedial goals and timeframes. Provectus is a technology provider that has established partnerships with a preferred network of global vendors and applicators.

If desired, we can use our preferred network to provide turn-key remedial solutions that may include laboratory testing and field application.



#### **Patented Biotechnologies**

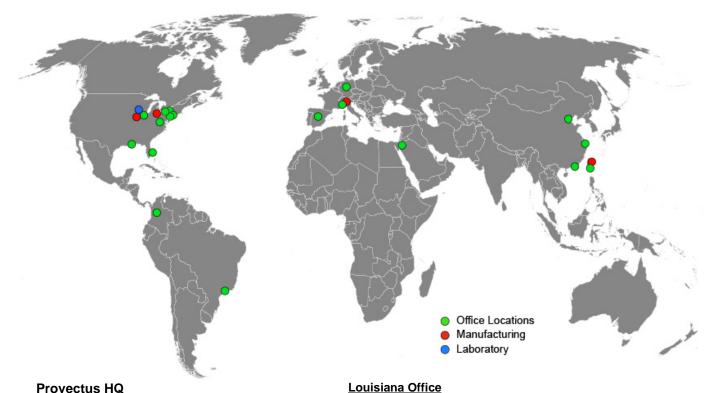
The Provectus line of patented (ten issued patents) and patent-pending (six pending) environmental remediation products are truly different, and they represent best in class, globally.

Application / Patent Number	Title	Filing Date	Issue Date
7,129,388 and 7,531,709 and 9,427,786	Method for Accelerated Dechlorination of Matter; Parts 1 and 2.		10/31/2006 and 5/12/2009 and 8/30/2016
7,828,974	Method for the Treatment of Ground Water and Soils Using Dried Algae and Other Dried Mixtures		11/09/2010
8,147,694	Method for the Treatment of Ground Water and Soils Using Mixtures of Seaweed and Kelp		4/03/2012
8,766,030	Utilization of Ferric Ammonium Citrate for <i>In-Situ</i> Remediation of Chlorinated Solvents		7/01/2014
9,221,699	Method for Inhibition of Methane Production During Anaerobic Reductive Dechlorination		12/29/2015
9,126,244	Use of Encapsulated Substrates to Control the Release Rates of Organic Hydrogen Donors		9/08/2015
9,126,245 B2	Chemical Oxidation and Biological Attenuation Process for the Treatment of Contaminated Media		9/08/2015
7,044,152	Apparatus for <i>In Situ</i> Remediation Using a Closed Delivery System		5/11/16
62/024,640	Method and Composition for Inhibiting Methanogenesis During <i>In Situ</i> Sediment Treatment	07/15/2014	
9,637,731	Method and Composition for Inhibiting Heavy Metal Methylation During <i>In Situ</i> Remedial Actions		5/2/2017
15/269,903	Inhibition of Methanogenesis to Control Wood- Boring Insects and Pestilence	9/19/2016	
15/408,145	Inhibition of Methanogenesis During Environmental Applications	1/17/2017	
62/641,074	In Situ Ferrate Production	3/09/2018	
62/641,085	Ex Situ Ferrate Production	3/09/2018	



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#### **Office Locations**



#### Provectus HQ

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#### New Jersey Office

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#### Bogotá, Colombia Office



Baton Rouge, LA 70810

tel: (573) 614-2788

#### **Ohio Office**

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#### Florida Office



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#### Taipei, Taiwan Office

TESC 台境企業股份有限公司 Taiwan Environment Scientific Co.,Ltd.

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#### Saluzzo (Manta), Italy Office



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#### Petach-Tikva, Israel Office



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#### Madison Laboratory



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#### Madrid, Spain Office



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