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The ERAtch Group LLC **纪元科技集团有限公司** **Company History and Capabilities**

公司历史与能力

把废物提炼成燃料供水泥制造业使用的概念、于1979年首次应用在美国的Paulding, Ohio的General Portland Cement (现称Lafarge) 作商业用途时、纪元科技集团的成员已经是这项科技的创新者和先驱。于23年间我们在这个领域里积累了很丰富的经验、也开发了许多技术、保持着这项事业里的领导地位。

The principals of ERAtch have been the innovators and leaders in the use of waste derived fuels for cement manufacturing since the concept was first commercialized in the US at the then General Portland Cement (now Lafarge) facility in Paulding, Ohio in 1979. With 21 years of experience in the field, we have developed a wealth of invaluable experience which keeps ERAtch the industry leader.

液体燃料 Liquid Fuels

我们是始创把液体废物作为水泥窑的燃料、而且也是处理液体废物燃烧历史最长的公司。我们发展出自己独特的、不会淤塞的喷嘴、把液体输入水泥窑的燃烧区、那是既简单、又有效且实际的做法。

Having been the first to use waste liquids as fuels in cement kilns and having operated liquid waste combustion for the longest in the business, we have developed our own proprietary nonplugging nozzles for the introduction of liquids into the burning zone of the kilns. They are simple, efficient and effective.

经过那么多年、我们发展出并制订了化验程序、能正确地分析废物中所含的基质。我们这样做是为了正确了解废物中的成份、以肯定那些物质在水泥窑里燃烧时、对整个厂子的运作、雇员和社区都会是绝对安全。

Over the years, we have also developed and written laboratory procedures to accurately analyze the waste materials in the complex matrixes in which they are contained. We do this so that we know exactly what compounds are in the waste streams and to assure ourselves and the cement operation that the materials being combusted are safe for the employees, the local community and the operation.

我们也建立了操作上的安全程序、以确保我们的工作人员、避免暴露在不必要的危险中。

We have also instituted safety programs at our operations to assure that we are doing the most to protect our workers from any unnecessary exposure.

半固体燃料 Semi-Solid Fuels

我们是发展悬浮液 (resuspension) 技术的领袖、把固体从液体的载体中解脱出来、将固体和半固体溶化在液体中的技术、应用到由废物中提炼燃料的程序中。我们的创新系统能把附在铁桶里的固体物清除出来、然后把他溶解于液体中。1980 年间、首先应用在我们位于 Ohio 州 Dayton 市的、溶剂资源回收公司的设施里。

We are the leader in developing resuspension techniques for solids that have dropped out of their liquid carriers and for the introduction of solids and semi-solids into liquid streams for introduction into waste derived fuels programs. We pioneered systems which removed the solids settlings from drums and the reintroduction of the materials into liquids at our Solvent Resource Recovery, Inc. facility in Dayton, Ohio in the early 1980's.

1992年我们把这种科技作商业用途、为Lafarge/Systech 公司在Kansas州的Fredonia地方的厂子、又于1997年为Rinker (CSR) 公司在Florida的Miami市的厂子、建立了大量固体和半固体的悬浮设施。那里的运作是用卡车把大批量的工业废料拉来、然后把它粉碎成适当的颗粒、悬浮于合适的有机液体中、最终运往厂子作为燃料使用。

We further commercialized our technology in 1992 by building a bulk solids/semi-solids suspension facility at both the Lafarge/Systech facility in Fredonia, Kansas and, in 1997, the Rinker (CSR) facility in Miami Florida. These operations bring in truck load quantities of industrial solids, we particle size the waste and suspend the material in suitable organic liquids for ultimate use as a fuel on site.

固体废物燃料 Solid Waste Derived Fuels

自从1990年我们发展了废轮胎燃料以来、更多的废物燃料系统已应用于世界各地的水泥窑。我们已经设计出、而且可以在长窑上安装全部自动化的物料(废轮胎)输送系统、利用Cadence式窑的中途输入闸。并且也安装适用于有预热器和灼热器的水泥窑的系统。我们的客户包括：

Since 1990, we have developed tire derived fuel and more recently waste derived fuel systems for cement kilns worldwide. We have designed and installed totally automated material handling systems for long kilns using the Cadence mid-kiln gate and have provided systems for preheater and precalciner kilns. Our customers have included:

- Lafarge,
- Holderbank,
- Blue Circle,
- Essroc Materials,
- Calaveras Cement,
- Medusa and Illinois Cement.

大部份的运作是利用废轮胎燃料、不过、我们也研制了一个系统可以燃烧：椰子壳、甘蔗渣滓、捆扎的城市垃圾以及其它有燃料价值的固体废物。

A large portion of our projects have been the use of tire derived fuels, however, we have engineered systems to combust: Coconut shells, sugarcane, bailed municipal wastes and other solid wastes that have a fuel value.

工程与评估服务 **Engineering and Evaluation Services**

由我们公司或者通过我们的关联专家们、我们可以评估个别水泥窑、发展一种最适用它运作的燃料规范。然后我们制订试烧计划书、呈交环保部门审核、并且帮助废物燃料使用者、申请试烧的许可证。由初步的概念至公开聆讯、通过研制系统至开始运作、我们富有经验而且能够提供协助使项目成功实行。

In house and through our professional affiliates, we evaluate each specific kiln to develop a fuel specification that meets the exact needs of the operation. We then can write a test burn plan for the local environmental agencies approval and assist the fuel user in obtaining the necessary permits to operate such a program. From the initial concept through public hearings through the engineering to start up of the system, we are experienced and are able to render assistance for a successful program.

我们的使命 **Mission**

我们的使命是以我们的科技投资于世界范围内建立合资企业。在那些有利用废物燃料机会的国家里、我们正不断地寻觅适当的合作夥伴。

Our mission is to utilize and capitalize on our technologies through joint venture operations worldwide. We look to team up with quality partners in countries which have waste derived fuel opportunities.

在进行了周详的可行性研究后、与当地的水泥生产单位洽谈和签署独家专供合约、供应最适合他们个别水泥窑使用的废物燃料。

After performing a careful feasibility study, we then enter into exclusive agreements with a local cement manufacturing operation to supply them with a fuel prepared to a specification which suits their specific kiln.

通过当地的废物收集夥伴、确保有恰当的废物燃料的原料供应、调配和生产所需要的燃料、经试烧后、源源不绝地供应合适的燃料。

Through our local joint venture waste collection partner, we then source the appropriate waste fuels feed stocks to blend and prepare the necessary fuels for a test burn and ultimately for the continued supply of the suitable fuels.

合资企业的运作 **Joint Venture Operations**

目前我们在英国、西班牙、台湾地区、科威特与智利进行合作。我们同时也着眼于世界各地的废物收集和水泥工业资源回收的机会。

Currently we are active in England, Spain Taiwan, Kuwait and Chile. We are pursuing other opportunities with local waste collection and cement operations worldwide.

结 论 **Conclusion**

经验丰富、表现出众、富创造性、完全合格、优质服务是描述我们“纪元科技”的业务与工作。以我们的专长、不断地寻觅合适的夥伴进行合作、来发展有意义的项目。我们希望听取你们对废物处理方面的意向、在不久的将来有机会与你们合作。

Experienced, leader, innovative, qualified and quality are all words that describe ERAtech and the business that we operate. We are always looking to team our skills with other acceptable partners to develop worthwhile projects. We look forward to reviewing your interests in this field and working with you in the future.

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