## The Solution to Pollution?

There are undoubtedly widespread problems with industrial pollution of all kinds, affecting the soil in which our food is grown and on which our residences are built, as well as the water we drink and bathe in. Indeed, invisible and harmful particulates are carried deep into our lungs via the very air we breathe every day. There is a quiet, but growing unrest about the severity of this problem.



In China, for example, news of heavy-metal food poisoning, excessive air-borne particulates in major cities, and village cancer-clusters are a regular media occurrence that is causing great disquiet, even outbreaks of civil disorder. In response, governments around the world are casting an ever tighter regulatory net to remediate this pollution. In these uncertain times, *the continuation and expansion of strong legal measures against pollution is one trend that is absolutely bankable for savry investors.* 

The pollutants themselves are a diverse and complex group of compounds, with new chemicals appearing, seemingly every day. Even so, one might be surprised to learn that the most widely used solution to this crisis is now *over a century old*, namely *'activated carbon'*.

That's right! The most commonly used pollution treatment is over a century old!

Moreover, *activated carbon* is by no means the *'silver bullet'* to address all these challenges. (Not only that: *it's expensive*.) However *activated carbon* has been almost the <u>only</u> option available . . . until now.

Molecular Mediation has exclusive rights to DevourX, a remarkable new method of processing lignite (brown coal) into a nano-material that is proven to sequester and degrade pollutant chemicals into harmless elements such as sugars, fatty acids and amino acids. By patented techniques, the lignite is treated with a violent "acoustic shock" that transforms the material into superfine particles riven with pores and channels.

These intricate recesses attract and hold chemical molecules within which associated microbes rapidly devour and disintegrate the compounds into their harmless constituent elements, like carbon, hydrogen, and oxygen. Furthermore, due to chemical shifts induced by the *"acoustic shock"*, the surface of these micro-channels and pores is highly water repellent (*hydrophobic*); oily materials are attracted and water excluded. The *acoustic shock* delivered by the *DevourX* technology is generated entirely by mechanical means and has low energy and capital requirements. An additional advantage is that lignite itself is abundant, especially in Victoria's Latrobe Valley - and *orders of magnitude cheaper than activated carbon*.

Thus, oil spills in water, for example, can be neatly captured and neutralised by means of this product's high affinity to oil and its' repulsion of water.

The combination of a low cost raw material, low energy demand, and low capital investment makes this product highly competitive against traditional methods.

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That's why this opportunity is so compelling: the current and growing problem of water, soil, and air pollution can now be dealt with using a cheaper and more effective product than the limited traditional approach that relies on *activated carbon*, an approach that is clearly failing to deliver a comprehensive solution.

The product has been branded **'Shamantra**', and has other significant features, such as providing a solution to remove carbon dioxide (CO<sub>2</sub>) from flue-gas streams. (This eliminates the need for any further search to find an economic method of carbon capture and storage, an effort that has so far cost millions with negligible results.)

By adding **'Shamantra'** to various high-value and readily-available natural fertilisers, almost unbelievable results can be achieved with the food grown from it, which as a result has the nutritional value that food contained decades ago. Such (*'greenhouse gas'*-free) fertiliser can be sold at considerably less than the empty nitrogen and phosphate-based fertilisers presently in use, which generate from 300 to 3,000 times the *'greenhouse gas'* emissions of an equivalent amount of CO<sub>2</sub>. Furthermore, runoff of such fertilisers contaminates waterways, incurring extraordinary environmental impact and harm to fisheries.

This ultimate fertiliser has been branded **'Humanic'** which is made by combining **'Shamantra'** with other substances such as mineral products with very high concentrations of microbes and beneficial bacteria. Although these microbes have been dormant in the ground for centuries, they are programmed to come alive under the right conditions, just as fish appear suddenly when dry rivers are flooded after many years of drought. This microbial and bacterial action upon soil multiplies and accelerates when coupled with humic substances and carbon content within **'Humanic'** producing soil rich in nutrients and minerals. The humic acid facilitates the availability of mineral elements that can be absorbed by plants.

Interestingly, the microbes and bacteria survive the *DevourX* process to become readily available and highly active, but are killed off in other processing methods that generate heat (from friction) in ball mills and conventional grinding equipment.

**'Shamantra'** has been thoroughly field-tested and verified. It can also be produced in the vast quantities needed to tackle such an expansive and worldwide problem.

The major problem *Molecular Mediation* faces is that this all *"sounds too good to be true"* and so, almost *ipso facto*, people may be inclined to think that it cannot be true! The reality though is that it is possible, and any investigation by interested investors and/or users is welcome. A brief paper providing some additional information is available upon request.

