



Asset Integrity Development



About **AID:**

You want to extend the lifetime of your assets? We will AID you!

Seaharvest provides the latest technology when it comes to unique, cost-effective solutions for plant life extension and facility integrity enhancement. Upstream, midstream or downstream; we empower preventive maintenance mentality as well as higher employee safety through introducing environmental friendly safe techniques.

Composite Repair (Cold repair)

Suffering from loss of thickness or through wall defects due to corrosion? Seaharvest has over 15 years of experience to solve your problem. With more than 10,000 successful jobs in Egypt, our qualified field team and our 24/7 global engineering team are able to provide the solution within 48 hours. With up to 20 years of guarantee, our solution applies on the most complicated geometries, above sea or sub-sea, and in the toughest operating conditions (up to 220 bars and 220 degrees Celsius). No need for a Shut-



down or a hot-Work-Permit. We offer a complete repair and structural re-enforcement solution over a wide range of pipe-work: pipelines, vessels, risers/caisson, clamps, tanks, roofs, floors, beams, and support members.

Spark-Free, Dustless Sponge Blasting:

Conventional blasting has so many problems, whether spark potential in case of flammable gas presence, or huge down time due to stoppage of concurrent operations while blasting, or environmental in the form of huge amounts of dust, or employee safety on the long term. These problems sum up to tremendous indirect costs, and even higher in the offshore applications.



Seaharvest offers a cost-effective solution to all of the above through its patented technology. With a proven track record over the past 7 years in Egypt, and a well-renowned performance over the past 25 years world-wide, our media (fast, dry, clean, safe and

recyclable) is able to attain any required roughness and cleanliness level with the highest precision possible.

Online Leak Sealing:

In order to adhere properly, almost every leak-repair technique requires the surface to be dry and blasted to a certain profile. Hence the line has to be shut-down for proper repair adherence to the damaged contact area. There are cases when the shut-down is a huge cost and hence the last resort; this is where we provide an alternative cost-effective solution that allows for performing the proper repair with no need for shut-Down. Special engineered clamps injected with the proper fluid surrounding the defected area will encapsulate the leaking area; and then the surface is ready to be blasted and dry for the proper repair.

Weld-less Assembly Solutions:

Conventional welding involves spark and hot work permit; which consequently requires a considerable shut down time as well as evacuation of flammable gases if any. In some critical cases this will ensure huge additional indirect costs. Our technology provides high performance weld-less flange-to-pipe

connections. The patented technology is a permanent solution for improving pipeline integrity and flow assurance; allowing for “cold work” pipe modification with a vast range of size and pressure ratings for most applications. Our technology is cost-effective, quick and rig-Less.



Torquing & Machining Solutions:

When it comes to any job related to machining (torquing, tensioning, cold-cutting, hot-tapping, bevelling) there are crucial factors to consider, mostly the cost, reliability of the team along with the equipment, as well as the response time to perform the required work scope. Seaharvest has the capability to provide the complete spectrum of on-site machining solutions through the proper qualified team and equipment. Adding to the above, Seaharvest is now in the initial stages of having its workshop to offer the complete machining scope in-House.

Trench-less pipe Rehabilitation system:

When corrosion has been working its way to eat in the metal thickness and structural integrity of the asset is jeopardized, even the conventional maintenance techniques won't recover the damage. Replacement may appear to be the only solution which huge costs (very long shut-down time - cost of the new pipeline - excavation and then again burial costs of the pipeline. It can even get worse if the line is passing underneath constructed buildings and corrosion is affecting the fluid being transmitted within the pipeline, like potable water pipelines. This is where we become even more economic. Seaharvest can provide a cost- effective solution; very quick to apply and at the same time requires negligible amount of excavation compared to the conventional replacement. With a guarantee for up to 20 years.



Facility Performance Optimization:

With increasing working hours slagging and fouling are inevitable, hence your boilers or process heaters will suffer from decreased efficiency, corrosion, less capacity and heat transfer decreases with the increased fouling. Eventually a huge amount of energy is lost; and on the other hand a considerably tremendous amount of extra fuel is needed trying to maintain the original asset performance.

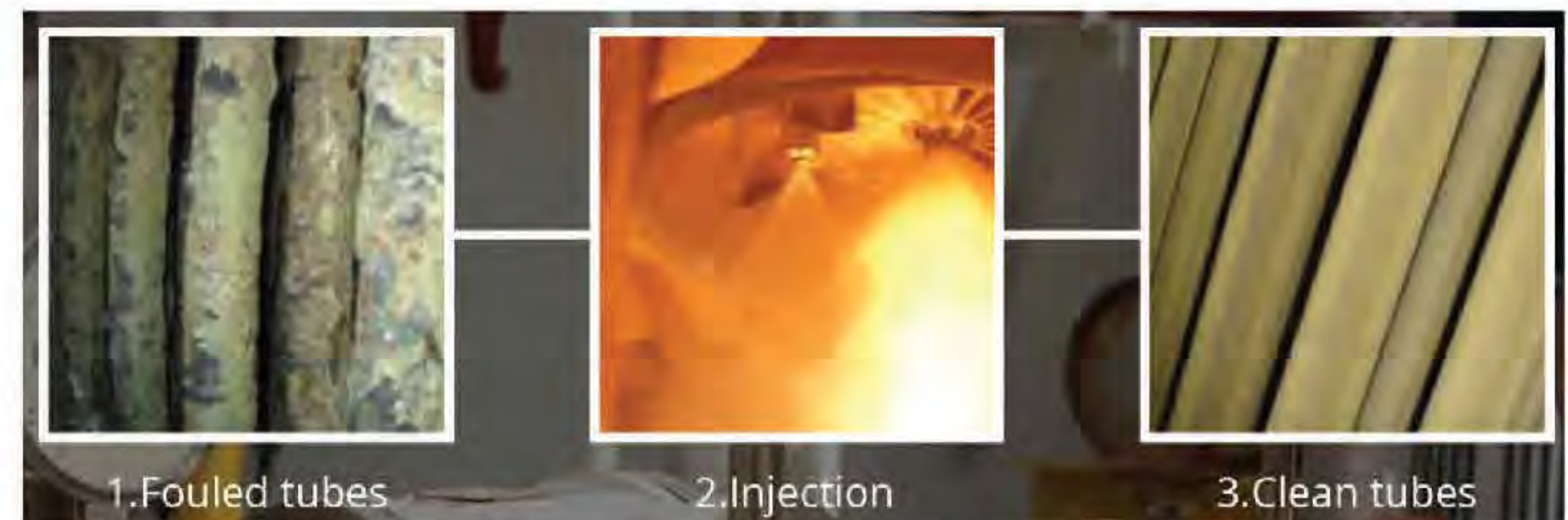
Like no other, Seaharvest offers a specialized cost-effective chemical that improves efficiency, increases capacity, reduces emissions and allows for a high return-On-Investment. With savings of hundreds of thousands of dollars, our patented technology has been proven in Egypt and world-wide on the most complicated and worst performing assets.



Cleaning and NORM De-contamination Services:

Awareness for the dangers of Naturally Occurring Radioactive Material is lately becoming a crucial safety concern and it is a MUST to be eliminated from any assets before any human-related interference. De-Contamination process has to be executed with the highest safety standards. Be it confined space, or artificial lifting-related assets, or tubing; Seaharvest provides a new cost-effective technology for NORM remediation that ensures the proper safety measures for the employee and the environment.

Another issue is the uprising stacked volumes of contaminated soil; which is causing a headache to all the operators. This is because there are no current capability for soil decontamination since it is a very expensive service requiring huge investments. Seaharvest is in the early stages of studying how to provide this service in Egypt.



Chemicals:

Seaharvest provides unique patented-technology chemicals in various fields. We provide emulsifiers, pour point depressants, oil retrieval chemicals, and many others. We have the capability of tailoring the function of the chemical with the proper formula to adequately address your problem.



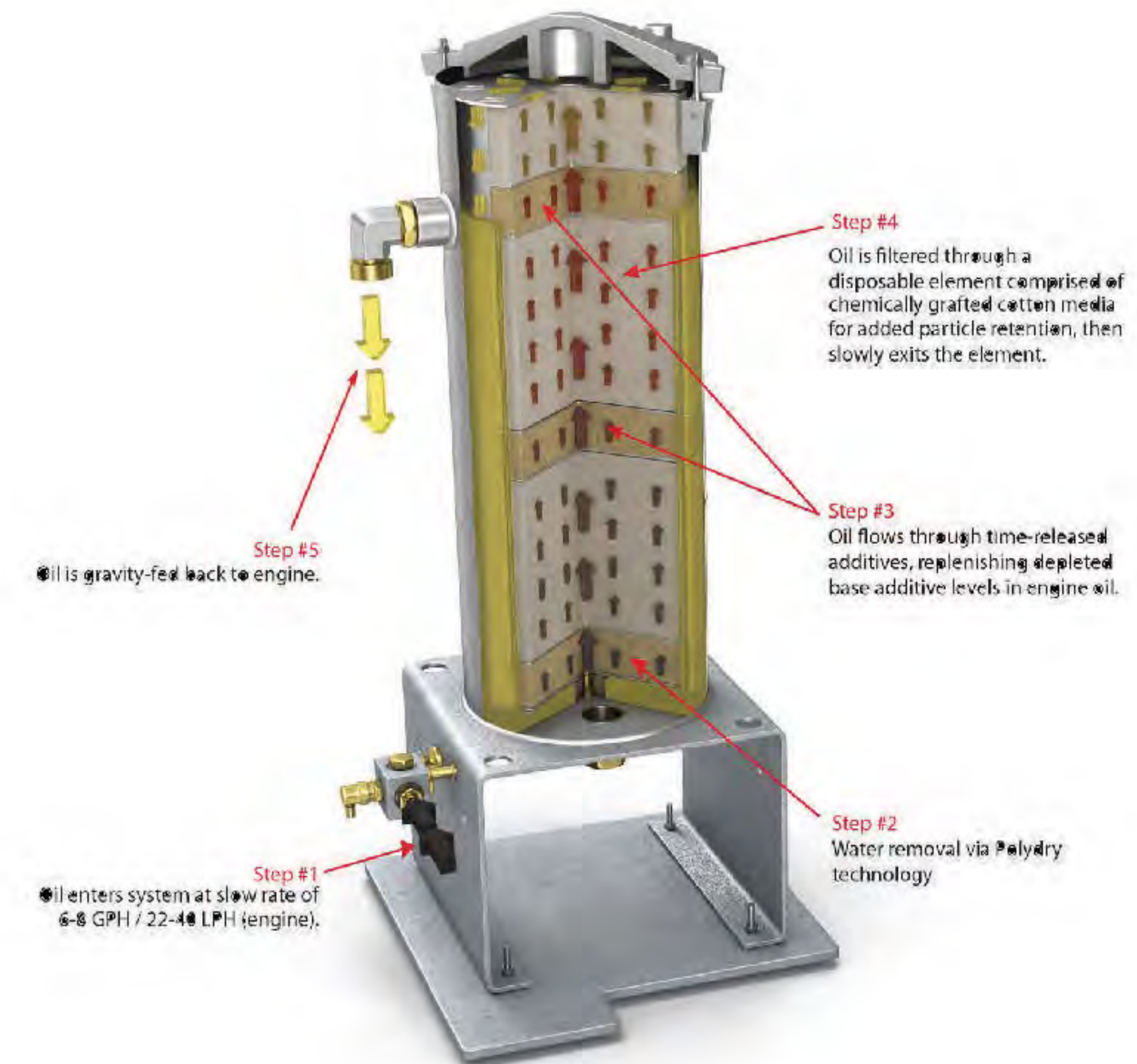
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Seaharvest provides performance enhancement chemicals, boosting the performance of the operating capital assets such as boilers or heat exchangers, while reducing emissions and restoring the original capacity. With a successful track-record within Egypt and world-wide, Seaharvest provides a very smart effective solution when it comes to asset performance optimization.”

The puraDYN®

Puradyn Filter Technologies, Inc. designs and manufactures the patented puraDYN® system, a highly efficient bypass oil filter designed to continuously clean lubricants used in engine, hydraulic, and transmission applications and reducing the need for 80% of oil changes.

The puraDYN® system continuously diverts oil at a slow flow rate and returns clean, like-new oil by removing solid contaminants to <1 micron, removing liquid contaminants and water, and for engine installations, replenishing key additives to maintain the oil's chemical balance (TBN) and viscosity.



Using the puraDYN system to reduce the frequency of oil changes by 80% or more also means storing and disposing of 80% less oil and reducing labor costs and engine downtime. Customers have also attributed extending equipment life by between 20% and 200% to their puraDYN filters keeping oil continuously clean. puraDYN systems have been running for decades on thousands of applications around the world, including oil rigs, tugboats, ferries, yachts, generator farms, and bus and truck fleets.

We Fight Dirty!