

# DISASTER SOLUTIONS



OIL SPILLS  
& DISASTERS

BIOLOGICAL  
PANDEMICS

BIOLOGICAL  
HAZARDS

NUCLEAR  
DISASTERS

NATURAL  
DISASTERS

CHEMICAL  
DISASTERS

DECONTAMINATION • LEGACY WASTE • SAFETY • RECYCLING • RECLAIMING • DISASTER MANAGEMENT

# OIL SPILL DISASTERS



Welcome, and thank you for looking over our materials and solutions for your disaster cleaning solutions and services. PowerPlus Cleaning Solutions has been a long time established company for disaster relief and remediation. PowerPlus was founded in 1987 and has been a part of every major catastrophe in U.S. history and many more disasters that span the world over.

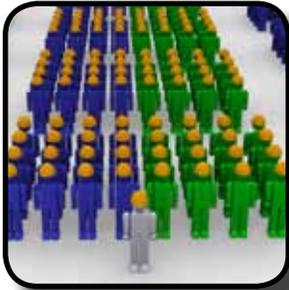
This packet is a basic overview of our capabilities along with informational data-sheets on our equipment. There is a lot of information and we are sure you will have many questions to come, so feel free to contact us with any questions that you may have and will be prompt to answer your questions.

We strive for excellence and we appreciate our customers. It does not matter if you need the worlds largest clean up effort, or if you simply want help deciding how to handle a small spill, we are ready to service your needs. Let us begin your venture to a disaster recovery by explaining some of the choices you will have in how to proceed with our involvement and your options for deployment. PowerPlus offers three different levels of deployment from a full on turn key option to a near do-it-yourself options. Full training is available if so desired.



#### I: FULL TEAM DEPLOYMENT

Full re-remediation / decontamination teams stand ready. We can come in, verify the level of contamination or levels of damage and report back to local government or businesses. PowerPlus can immediately begin the process of reclaiming the lands and produce no landfill waste during the process. Having full support teams also means that no additional support will be required during the process and is all inclusive. A certification of cleanliness is available for all areas that have been decontaminated by our certified teams.



#### II: CROSS TEAM DEPLOYMENT

With our technology and your workers, we can work together to decontaminate your lands and homes. PowerPlus will send training teams and supervisors watch over your workers and train them in the decontamination process, while our specialists and supervisors test to ensure the work is done correctly.



#### III: CONTRACT DEPLOYMENT

Our trainers/specialists can be deployed to watch over your workers and verify that the process is complete along with training them in those techniques. The work is up to the employees to complete in the entire process. Additional purchase of necessary equipment may be obtained through PowerPlus.

From these points, you can now look over the technology and the systems we have available and make a more educated decision on how you wish to proceed. We know there are many companies who claim to be what we are, but we have the technology and the proven results to back up our claims and can deliver our promises. Do not settle for an in-complete solution! Thank you for your time in reviewing our material, and we look forward to servicing your needs soon.



## **Certifications Accredited to PowerPlus**

In any given disaster there are hundreds if not thousands of potential “solutions” to them. People come up with ideas that boggle the mind and sometimes can be dangerous. There are governing bodies that have been set in place to review these ideas and concepts and either approve or deny the usage of any of them at any given point. PowerPlus Cleaning Solutions has had approval from these governing bodies for in-situation-approvals, or InSitsu Certified.

- OSHA
- USDA
- EPA
- NOAA
- Dept. of Navy
- FDA
- Fish and Game
- Homeland Security
- U.S. Coast Gaurd



## Contents

Oil Disasters .....	1
Prodigy Bio .....	2
Clean and Capture (Cac).....	3
Contaminate Extraction System (CES) .....	4
Shallow Water CES Solutions .....	5
Deep Soil Decontamination .....	8
Deep Soil Tracked System .....	10
Oil / Water Separator .....	12
Water Contamination Prevention.....	13
Heavy Metals Decontamination.....	14
Vessel Decontamination .....	15
Personnel Safety .....	16
Legacy Waste.....	17
Covering a multitude of disasters .....	18
Data Sheets.....	19

[Click on any topic to go there.](#)



## Oil Disasters

Decontamination of precious resources is vital to the preservation of those resources and the environments that provide homes to all living things. Oil, is a valuable commodity to people across the globe. It is a resource we rely on for fuel, production, and living. Companies have a large responsibility to maintain their facilities and conveyances. Spills have a huge impact on the environment as well as the bottom line for those companies, so spills and leaks should be the highest priority to contain and clean.

The leaks, sometimes are small and easily dealt with on site with local equipment and personnel. But what happens when large ruptures happen, or when oil lines stretched over marsh, oceans, rural areas, or any other place that would normally be out of reach? What equipment can address any surface without destroying it or require scraping the ground and dumping the contaminated soil into land fills which leave behind a legacy of waste?

In short, PowerPlus Cleaning Solutions lives up to its name by having those solutions, today. PowerPlus has developed the technology and the methods that you need that will clean up the smallest puddle, to the largest spills. We look at the specific needs of any disaster and write out prescriptions that would facilitate the needs of the client as apposed to a rubber stamp and assembly line approach. In short, this gives you customized solutions that will work for you first time, every time.

PowerPlus has had a hand in nearly every major disaster that the US has had including, BP Oil Spill, Katrina, 9/11, Exxon Valdez, and the Anthrax scare against the Senate. Each disaster brings new innovations and solutions due to specific needs of each event. But, overall the newer technologies and advancements bring better and better solutions and more chances to grow and keep the rest of the remediation industry on their toes.

But what are these technologies? Great question! Let us begin with the first of our technologies, the Prodigy Bio.

# Prodigy Bio



**Prodigy Bio** is the culmination of years of research and development at PowerPlus Cleaning Solutions. Several generations of this machine have seen action in several of the worst catastrophes the US has seen. Each disaster has led to new innovations and has created the finest decontamination and cleaning machine known.

This powerful machine can produce over 4000 PSI of force capable of cutting a 2"x 4" piece of wood in half, yet is gentle enough to clean birds and small animals with the greatest of care. This all stainless steel machine can decontaminate itself as well as any surface.

The addition of **S.O.V.C.** which regulates the suction of the Prodigy Bio, creates a .21 H.G. of vacuum. That translates to 2/3 perfect vacuum. This is a high standard that allows the Prodigy Bio to clean as well as it does utilizing the **Clean and Capture** tools. The ability to create heat up to 90,000 BTU's gives the Prodigy Bio an edge in being able to clean deep into pores that would be otherwise closed off to lower temperatures.

This machine can also run up to 1000 feet of hose in any configuration. In other words, you can run multiple lines from this machine that equal up to 1000 feet and still maintain full pressure to each of the working tools. This increases productivity and increases cleaning times many times over.

Being made of stainless steel, gives longevity and durability. The design of this machine makes it robust and strong. It is user friendly and with the right training becomes second nature to use. Prodigy Bio is also meant to be powerful yet mobile enough that it can be mounted on nearly any kind of vessel and not disturb the functions of that vessel. During the BP Oil Spill, many of these machines were placed on conventional boats and set out to sea to decontaminate large vessels, while others were mounted in trucks and vans to do remote flood, asbestos, and mold abatement during Katrina.

Stainless Steel holding tanks and fittings also means that you can run any industrial chemical through it and not worry about deteriorating the interior of your tanks. This well built machine is tough and can go the distance with the power and stability you need.



## Clean and Capture (Cac)



**Clean and Capture** was developed with the concept of being able to clean any given surface at any angle including surfaces that are underwater. The concept seemed simple enough, but the actual engineering and designs took years to get right. But, today we stand proudly behind the capabilities of our tools and we are excited to how they can work for you.

Clean and Capture is defined as "The process by which high pressure agitation and immediate extraction occurs within a closed tool head. This creates superior cleaning results with no run-off, over-spray, or cross-contamination."

It works by creating a sealed environment within a cleaning tool's head wherein chemicals, water, or solutions are injected into the surface at a controlled heat level. As the agitated water breaks up particles and reaches deep into the pores of a surface, a near perfect suction pulls the contaminates and dirt particles out of the surface. Other times special chemicals are needed to deal with specific contaminates such as radiation, oil, etc. In these cases, the tools allow for these special chemicals to be used without harming the tool and actually attracts the contaminates out of impossible crevices, making them accessible to the agitated solution and again is caught up by the powerful suction and then captured by the tool where it can be stored in a remote location and processed. This method also avoids cross contamination by containing the entire process within the tool head taking all the contaminates out of the environment while leaving the rest in tact. The containment within the tool head prevents these contaminants from finding their way back to the workers cleaning any given surface. This provides the workers a safe tool to decontaminate with and adds to their own safety in a crisis situation.



Gentle enough for small animals



Tough enough to clean asphalt

The ability to remove contaminants from the soil and other surfaces goes a long way in the decontamination process. But what happens when you do not want to move the soil from its location or are unable. Many times you will want to process the land in place and keep the environment in-tact. In the cases of areas like marshes, swamps, and other water logged areas you will need solutions that can be made mobile and can be moved over water. For sand, grasses, crops, and forested areas you will need solutions that can mobile but leave the cleaned objects in tact. For whatever your particular needs are, we have solutions for all of it.



## Contaminate Extraction System (CES)

CES allows for C.a.C. to clean any soil or grass in place without disturbing it. Specially designed tools such as the screen mesh (show left) that hold the ground in place while the Clean and Capture tools glide over it pulling the contaminants right out of the soil. The technique works well and can go several inches deep into the soil depending on the density. As seen in Fukushima Japan, CES was used to decontaminate radioactive material from tennis courts, grass, and orchards, with fantastic results.

Utilizing specially prepared tarps and cleaning methods, CES can clean crops, trees, bushes, and other hard to clean areas. In the case of a tree, the special tarp is placed under the tree to collect any contaminants. A CES spraying wand is used to apply any solution or chemical needed for the particular contaminate (if needed) and allowed a pre-defined dwell time. After that time is up, the crew can come in and continue the spray-down of the tree all the while a worker below is collecting the runoff with the C.a.C. tools. This facilitates avoiding further contamination of the ground while decontaminating these hard to clean objects. The tarps can be then moved to new locations and the whole process can begin again. Larger tarps that can handle several trees at a time are available to you or to our teams. Imagine getting your crops, or forests back without having to bulldoze and creating large landfills. Imagine enjoying those same trees today and your children enjoying them tomorrow.





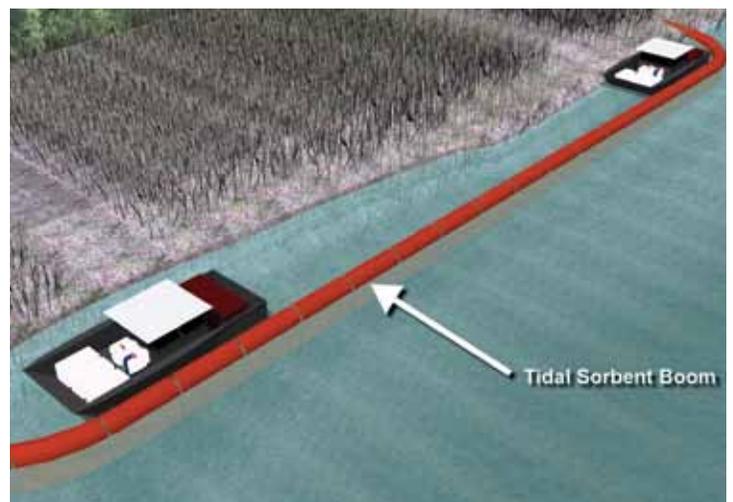
There are locations and types of vegetation that is hard to clean and be able to move equipment into those areas. How do you move heavy equipment into shallow water areas and manage to clean all around? CES has those locations and solutions handled as well.

## Shallow Water CES Solutions

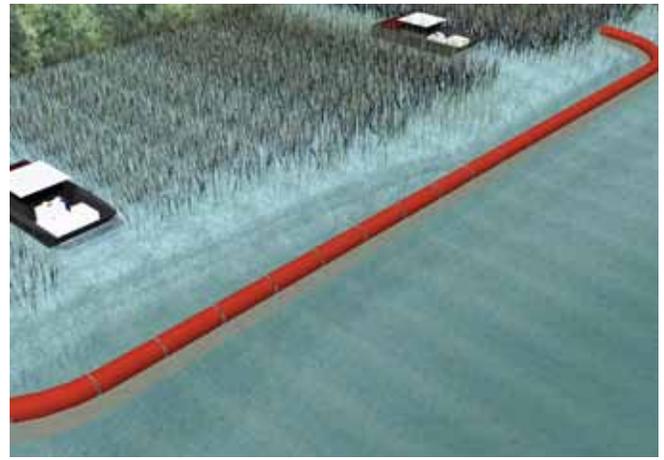


CES is a complete system with the ability to reach to virtually any location. In Nigeria, PowerPlus CES has addressed the issue of oil contamination on their Mangroves. These represented a challenge as the oil has penetrated deep into these twisted and thick vegetation. The roots of these trees have been completely soaked and have the additional problem of the tides coming in and out daily. Still, we are able to help by mobilizing CES onto a shallow water system. Thereby giving the mobility we need to address the concerns of shallow water problems.

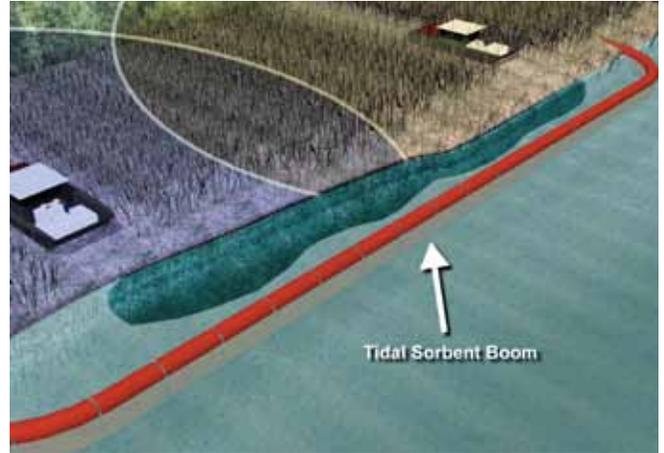
Of course this is not the end of the solution. CES, approaches Mangroves, and other areas like them with special attention. At the first contact, we send our boats to the location with special "Tidal Sorbent Booms" or floating containers and isolate the area we are going to address first. The booms capture any oil that would otherwise go back into the surrounding water by means of specially designed material that soaks up the oil and skirts that hang below the boom that control the water current so the oil can float to the surface without being disturbed.



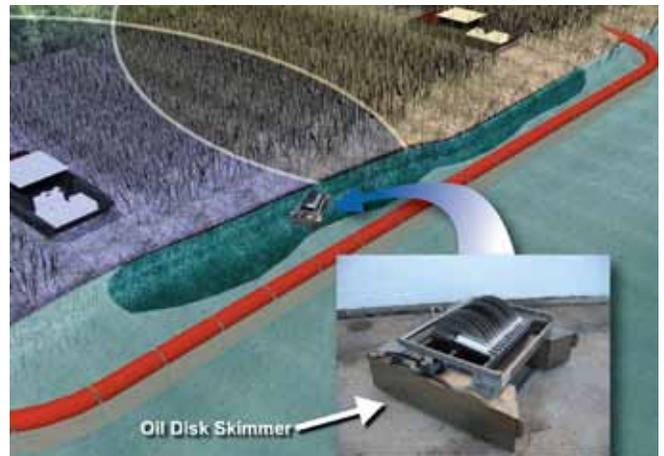
As we have contained the area, we are now able to isolate sections of the Mangroves by cutting sections that allow the boats to float into place while the tide is high. The distance between the boats can be upwards of 300 Yards. Each boat has a maximum cleaning radius of 1000 feet.



When the tide goes out, each boat crew cleans their designated areas utilizing the Prodigy Bio's heat, power, and an indigenous bio enzyme product, the tree stalks and roots in each teams zone is treated. The solvents in the solution separates the oil from the stalks, to which the enzymes immediately attach themselves too and start to decompose oil. The 5-10% of the oil product that is not consumed by the enzymes, demulsifies and gets washed back to the specially designed tidal sorbent boom.

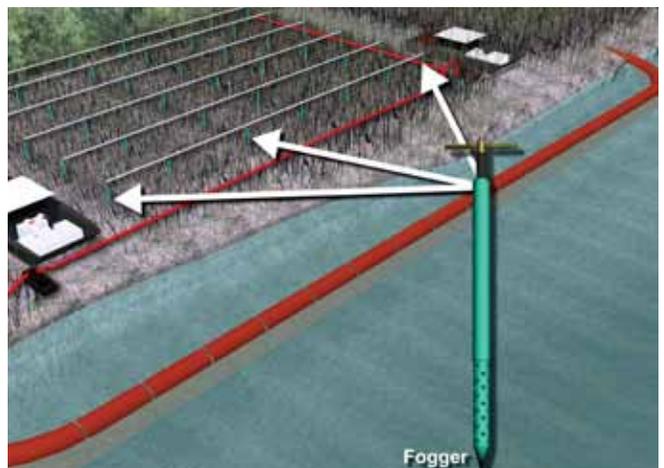


These purpose built booms control the tidal currents under the water surface and promotes the demulsifying of the oil from the water. The globules of oil then float to the surface where an oil skimmer collects the remnants and then channels the oil back to the Prodigy Bio's where the water is separated from the oil and the oil is collected to be re-used.



The enzymes that are left on the stalks continue to digest the oil contaminates and help promote a healthy food chain once more.

As the oil is cleaned, a second round of a special oil eating enzyme treatment is deployed with **D.C.U. Deep Soil Foggers** are placed to help the fertility of the ground and promotion of healthy environment is encouraged.





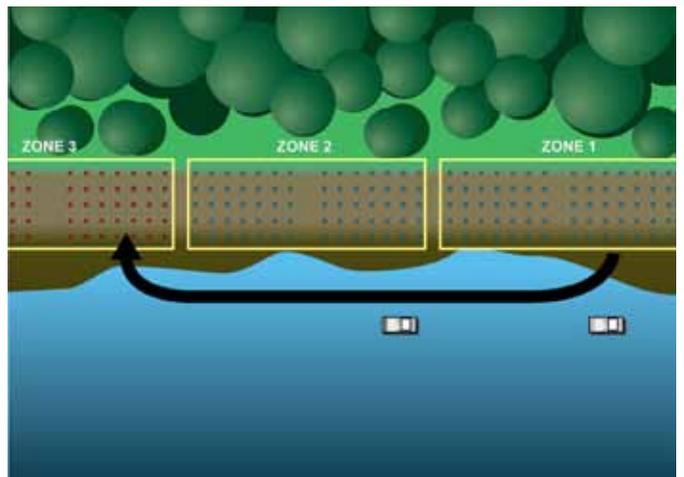
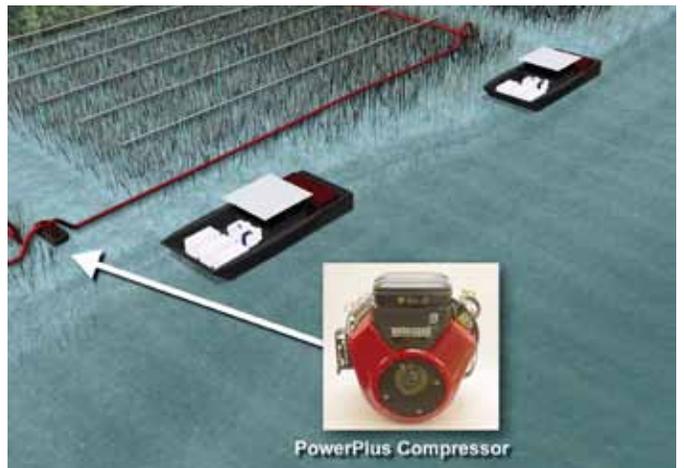
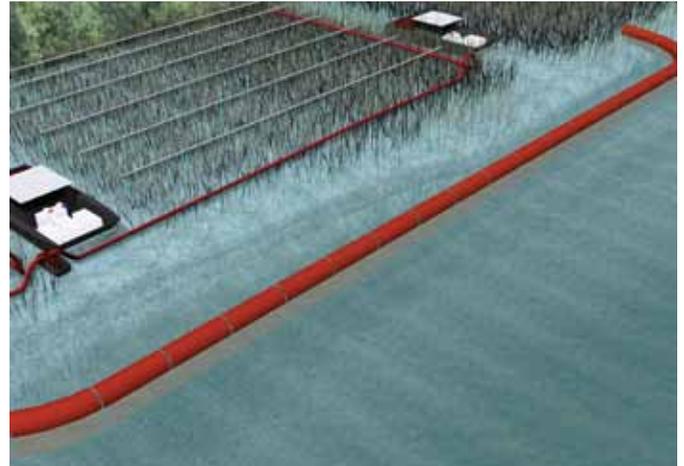
When the deployment is complete it should be about time for the tide to come back and float the boats and the engine that keeps the pressure on the tubes air-rating the soil. The boom is then collected , cleaned, and then moved to the next section of contaminated mangroves.

Part of the maintenance will be to come by daily refuel the PowerPlus compressors and introduce new enzymes into the constant air-ration of the land/soil.

The process is expected to take two to four months per air-rated zone.

CES methods save you money and increase the longevity of your equipment. At the end of the fogger cycles you can rotate the fogger treatment from the first treated area and then move it to the front of the line in rotation. This means, that you won't have to spend more money to decontaminate all the areas at once, but simply follow a rotational schedule to reclaim your land.

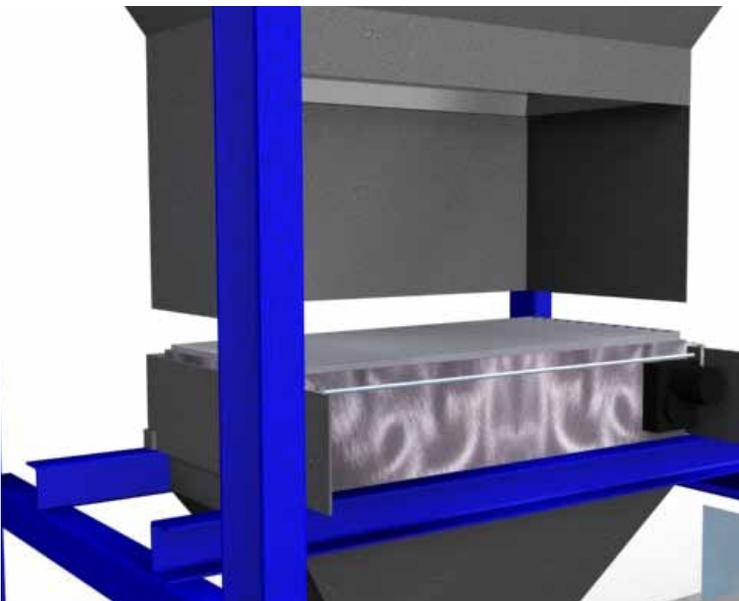
In the illustration, zone 1 has completed its cycle and the fogger treatment can then be moved into cleaned zone 3 ready for fogger treatment.



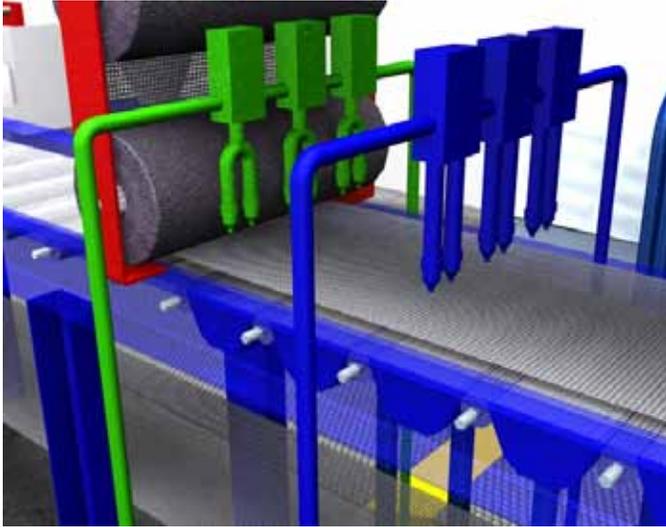
# Deep Soil Decontamination



Contamination does not always happen within a few inches of the surface. Rain, moisture, porous materials, pressure and other forces send much of the contamination deep under the surface. So, how can you clean so deep, yet still keep the soil in relatively the same location? Well, PowerPlus has a solution for that as well. CES includes machines that can clean soil both on location or a larger processing plant that can be established to decontaminate soil from any location. Either way it will decontaminate oil, heavy metals, or Naturally Occuring Radioactive Material (or NORM) from any soil or organic material you can throw at it.



As the material is dumped into the system a sorter will remove any large debris from the machine to be pulverized via a large mulcher and then resorted back into line with the rest of the material. The material is condensed onto a steel mesh conveyor belt (much like the CES Mesh) and scanned with the appropriate scanners. Oil, radiation, chemical, etc, scanners can be added to this machine to detect whatever the situation calls for. As the material passes under the scanners, the exact location and section of material is recorded into the machine and the machine matches the speed to whatever setting would best to suit the needs of that particular section.



The material is moved down the conveyor where it is sandwiched between another layer and computer controlled nozzles spray chemicals and water as needed to the specific areas thus eliminating unnecessary usage. This also helps minimize the costs of maintaining these machines. The saturated material also has powerful vacuums underneath pulling out unwanted moisture and contaminants.

Scanners down the line verify that the procedure has completed its task. This process is repeated as much as needed until the material is cleaned and the brought back to the original location from where it was dug up and then replaced. Any material that does not meet the required levels is automatically brought back for reprocessing and, if necessary, flags any material that will need special handling can

be done by personnel. Example: Radiation core material that may have been ejected and found elsewhere could be found in the soil being cleaned. This would require that the source material be removed and contained by special procedures.

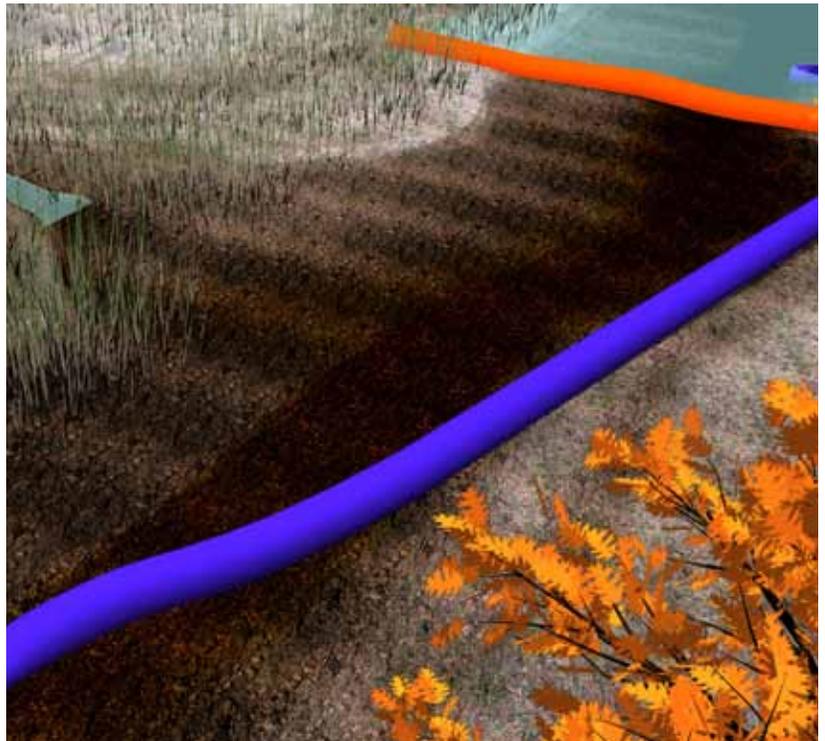
The versatility of this machine brings much value to the table. It has the ability to match whatever size you may need. From small plants that can be more mobile to larger facilities that handle tons of materials per day, the D.C.U. Earth Decontamination Machine can match your needs.



## Deep Soil Tracked System

The **D.C.U. Earth Decontamination Machine** works wonders with large amounts of soil but is not always practical when it comes to terrain or locations that are deep within jungle areas or river ways. So, CES has condensed this machine into a trailer that can be mounted on tracks, delivered to a location, and then easily moved to new locations on its own tracks that it carries with it.

In the event of river way, a boom would be placed at the head of the area that is to be cleaned, thus diverting the water through a tube that would allow the river to flow while workers could then begin laying the mobile track and mounting the trailers.

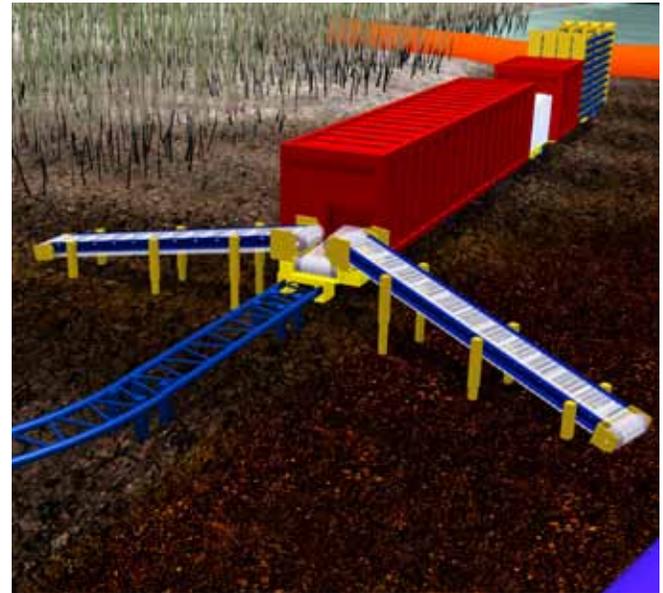




As the tracks are laid and the facilities are assembled, workers then start feeding soil on to the conveyors located on the sides of the tracks that feed the machine. Workers can go as deep as the contamination and this machine will process all that it is given.

Special **D.C.U. Deep Soil Foggers** are available to promote environmental health with special “Indigenous Enzymes” for deep soil treatments for heavily contaminated areas.

When the area is cleaned the workers can build a track that will match the grade and curve of the terrain and the entire assembly is moved down those tracks to begin the entire process over.



The machines are carried on specially designed carts that hold on to the track much like a roller coaster. This prevents toppling and damage to the machines as they are transported down the tracks. In hard to reach narrow channels that have oil slicks, the PowerPlus hand Weirs are available to clean those areas as well. As the machines and equipment grow dirty, the Prodigy Bio and Clean and Capture tools are used to clean those surfaces maintaining the utmost efficiency and service adding long life to your equipment.



# Oil / Water Separator

Water, is by far one of the most valuable natural resources we have. It is vital to protect it and keep it clean for all forms of life across our Earth. Yet, it is also one of the most easily violated and damaged commodities that we have. Oil, radiation, chemical dumping, and all other forms of pollutants threaten to destroy our water and at times it seems there is no way to clean the contaminants that already exist. PowerPlus Cleaning Solutions is here with the answer.

Our **D.C.U. Filters** can handle thousands of gallons per hour and can capture any contaminants to produce drinkable water from the most polluted sources. The five stage process separates oil from water, and then filters large debris and objects from the water down ever progressive filters followed by a special chemical based filter (PowerPlus RadCap) for radiated waters.

The filters are “Hot-swap” capable in that, when they are full they can be replaced with empty filters without stopping the process or loosing productivity. Each filter has a special set of instructions for how to deal with the materials left inside. They can be cleaned and reused over and over while the collected material can be safely stored and is, most of the time, has cash value to industries.

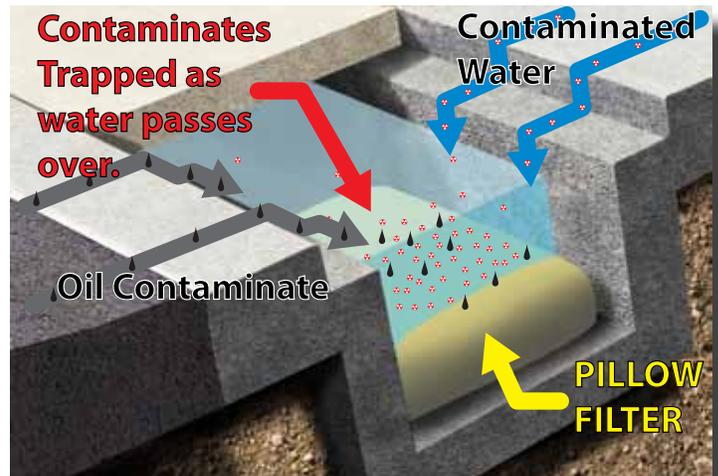
With large oil spills and the like, there are many proven methods on how to isolate and capture those materials. But our technology goes a step further by having a built in water / contaminate separator already built into our machines like the Prodigy Bio. This means you can, collect, clean, contain, and redistribute clean water and source material back into the production line all with the same solutions. At the end of the day when BP Oil pulled in its miles of Boom to be stored, PowerPlus machines were there with the Cac and CES technologies to clean those booms so they could be re-used for any further disaster. It also was able to store the collected material and return it to the refineries for later processing. That is money back in their pockets.



# Water Contamination Prevention

Another consideration is the runoff created by contaminants from long term exposure, and or improper cleaning approaches. As contaminants are washed off surfaces by rain or improper cleaning, that contaminated water goes down into drains or into water ways which soak into the ground and eventually come back into the drinking water or water that is then used by crops to grow. This can contaminate entire crops of food making it unsafe for consumption. Farmers can be wiped out by threats like this, not to mention the millions of lives who could. Unknowingly, eat contaminated food. Again, this all points to the importance of maintaining a clean water source.

One way to mitigate the continued introduction of contamination into your sewage and waterways is through the use of our specially treated **D.C.U. Collection System** which blocks the waterways from debris and contaminants, but allows the water to flow in. This helps reduce new contaminants from entering your system and start the process of reclaiming the contaminated water supplies. In Oil and Chemical disasters, these devices can be wrung out and re-enstated quickly continuing to prevent solid waste.



These illustration shows the Pillow and Roll Filters being utilized in a gutter situation. The contaminants are attracted to it due to special chemical agents that the pillow is soaked in thus attracting the contaminants. As the filter is slowly engorged with these contaminants, it can be re-cleaned and recycled to be used over and over again. Other filters would be placed in front of gutters, in open water streams, or wherever water would travel.



# Heavy Metals Decontamination

All different types of material can be cleaned using the Clean and Capture (CaC) and Contaminant Extraction Systems (CES). PowerPlus DCU has made huge improvements on decontamination tools and methodology that allow them to clean heavy metals that reside in surfaces and in deep pores.

Lead, Cadmium, Selenium can also be cleaned out of contaminated areas, along with a host of other heavy metals. In special cases Normally Occurring Radiated Materials or NORM materials contain things like Barium, Calcium, Strontium, Radium sulfates, and other radiating materials, our RadOut, Refresh chemical line are specifically engineered to match whatever contaminants you have and the Clean and Capture tools allow us to utilize them at specific temperatures and pressures to assure a clean surface when we are done.

From large ships to ground soil, we can capture, clean, and restore your precious resources back to their full use. No metal or contaminant is too tough for PowerPlus DCU solutions!



## Vessel Decontamination

Clean and Capture tools have been servicing large naval vessels for years. Among the most recent large scale decontaminations to occur was the BP Oil Spill in Gulf of Mexico. Literally hundreds of ships lay out at sea unable to come into port because they were covered in layers of oil from the spill. PowerPlus Clean and Capture tools were mounted on small boats that went along side their larger cousins and cleaned every square inch of the hull surface. From small boats, tankers, cargo ships, and even cruise ships can all be serviced with the Clean and Capture tools from PowerPlus.



Cleaning on ground

Prodigy Bio on board





## Personnel Safety

Your workers are your most important asset on any job site. They do the work you need to have done, and they are the ones who operate the machinery that gets the job done. They have the skills that take a lot of time to develop and years more to apply that knowledge to gain full efficiency.

You need to make sure you protect your workers / investments as well as possible. No matter what the catastrophe is or where, PowerPlus stands by ready to deliver the worlds best protective gear to keep them safe. In Fukushima we sent our crew in with RST shielded radiation suits. The only suits in the world that can block alpha, beta and gamma radiation particles.

We also have mobile command centers at your disposal to oversee the projects and keep coordinate sites from all around the area moving cohesively as one unit. These centers come equipped with:

- Mobile Communications
- MSDS, Personnel Safety Logs, Safety Procedures
- Mobile Laptops Containing All Safety Data
- Large Screen Monitors For Training On Site
- Tool Storage
- Personnel Sleeping Racks
- HEPA Positive Flow Air System
- Cooling And Heating Systems
- Indoor And Outdoor Lighting Systems
- Decontamination Pits
- Generator
- PASS Proprietary Software



## Legacy Waste

Waste is always the concern when any disaster strikes. Waste of resources, waste of manpower and money, and of course, waste that lasts into the future. The last one can affect everything from economy, health, environment, to the little kids who have to place to roam freely because of the landfills that take up the space where forests and usable land once was.

The PowerPlus technologies are all designed around minimizing or eliminating waste all-together. The machines are designed to collect and separate contaminants from the natural materials and allow the materials to be returned into the environment free of the harm. And the harmful material is designed to be re-usable and or recyclable. **Either way means, no landfills.** This means no wasted land, no costs of burying the waste, no costs of maintaining that waste, and no future threat of contaminants leaking and polluting ground water and soil that we use to grow crops and live with.

Why would you want a dump where trees once stood? You would not. But when all other solutions give you that as a choice, your choice becomes clear.

# Covering a multitude of disasters



Bio / Chemical



Mud slides



Bio Pandemic



Tornado



Earthquake



Hurricane



Fire



Volcano



Oil



Flood



Nuclear

PowerPlus Cleaning Solutions has the experience and expertise to clean any major disaster known to man today. They pride themselves on their twenty four years of disaster remediation including many of the U.S. largest disasters to date. PowerPlus has had to ramp up quickly and overcome many obstacles that come with breaking ground in the decontamination processes. But they also constantly set the bar higher and higher in an ever growing field.

There are many different types of disasters, and each of them require their own methods and approaches. PowerPlus realizes this and can write prescription methods to customize each incident which increases the effectiveness of the technologies they use. Having no limit on what they can clean, here are some examples of how their equipment can serve in disasters and clean up efforts.

While we are decontaminating and cleaning up after these disasters, we also wind up addressing

- Upholstery
- Carpets
- People decontamination
- Animal decontamination
- Vehicle decontamination
  - Large Naval Vessels
  - Cruise Ships
  - Airliners
  - Cargo Planes
  - Cars
  - Trucks
  - Trains

Crops, trees, shrubs, grass, vegetation or surfaces of any kind can be addressed at the time of decontamination.



# POWERPLUS

C L E A N I N G S O L U T I O N S

# DATA SHEETS



PowerPlus Disaster Clean Up  
1525 Endeavor Pl. Site O, Anaheim, CA 92801  
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<http://www.oil-dcu.com>





# PRODIGYBIO



## Specifications

Dimensions	W 34.5", H 40", D 42" (including waste tank)
Weight:	475 lbs. (with tank)
Frame:	Powder-coated high strength steel
Engine:	23 H.P. Vangaurd/Honda overhead valve
Water Pump:	Oil Bath at 6.8gpm at 4000P.S.I.
Heating system:	Stainless steel 3 element exchanger
Recovery tank:	70 Gallon heavy-duty stainless steel tank
Hoses:	1000ft. vacuum +1000ft solution hoses
Instruments:	Rugged marine gauges
Wand:	Two-Jet stainless steel S-bend wand with bypass
S.O.V.C.	Included
Construction:	Stainless steel panels
AC	120volts 20amp True Sign Wave

## Why do I need a Prodigy Bio?

The Prodigy Bio is the fastest way to handle the largest catastrophes, down to the smallest cleanups. This machine can decontaminate, and process Oil, Radiation, Air Borne Pathogens, and other known hazardous materials.

The Prodigy Bio is also capable of pressure washing, cleaning carpets, upholstery, and all hard surfaces, as well as graffiti removal, floor stripping, drain cleaning, and hyrdo jetting. From A to Z this machine services all cleaning needs.

## Capabilities

- The Chemical Injection System allows for virtually any chemical to be applied hot and with pressure, such as Solvents, Cleaners, Enzymes, Quaternary Disinfectants, Caustic Soda, etc..
- **80% more vacuum** than most large truck mounted machines
- **Four times the airflow** and 22 inches H.G. of vacuum.
- **Twice the capacity** of most pressure washers water pumps
- **Twice the heat** to assist in decontaminating and cleaning.
- **4000 PSI of working pressure** at the tools
- **Stainless Steel throughout**, including holding tank, heat exchangers, mufflers, exhaust system, machine panels and more to facilitate cleanliness / sterilization.
- **Filters in the tank** clean Biohazard/Hazmat Waste with a disinfectant and heat, sending the waste to a stainless steel holding tank where it is treated with Ozone and UV light prior to disposal. (Usually allowing sanitary sewage disposal)
- **6000 gallon per hour Pump Out** pumps treated waste to a drain or secondary tank allowing unlimited disposal of anything from dirty water to Nuclear Waste.
- **Cleaning / decontamination of itself**, its hoses, and attachments with Clean and Capture technology.
- **Remote operation or under disaster conditions**, The Prodigy Bio can provide its own clean water, 120V. of clean AC. power, and can operate on Gas or Propane Tanks with the flick of a switch.(Diesel available.)



# PRODIGYBIO

## Features

- Self cleaning/sterilizing
- Oil/Water separator built in
- Can run virtually any chemical
- Clean and Capture ready
- Pressure washing with chemical and heat up to 4000P.S.I.
- AC 120V 20amp. power outlets True Sign Wave
- Ozone, UV light, chemical, heat sterilization and decontamination methods capable.
- Pumpout
- No Hazmat waste created

## Facilitates

- Emergency Management Center (EMC) and the Comprehensive Emergency Management Program (CEMP) -71:4027-4030
- Hazard Vulnerability Analysis (HVA) and Emergency Management Program (EMP)
- (OSHA) Hazardous Waste Operations and Emergency Response regulation (HAZWOPER), 29 CFR 1910
- Occupational Safety and Health Administration
- 29 CFR Parts 1910, 1915, and 1926 1928
- Blood-borne Pathogen Standard 29 CFR 1910.1030 and 1915.1030
- Hazardous Liquid 1910.106
- 4953: Refuse System
- (HASP) Requirements
- IAQ 1915, 1926, 1928

## Optional Upgrades

- Dual Fuel (Propane or Gas) Diesel available
- Choose from three different water softeners
- Heat exchanger upgrades for higher temperatures and volume
- Hose cleaning and decontamination tools
- Hydro Jetting attachments for drains
- Drain clean out attachments (Scum Sucker)
- Upholstery and drapery tools
- Liquid cooled engine options
- Silencing packages for ultra quiet operation
- Auto Pump Out 60,000 GPH
- Pump out that handles mud, sewage, and small rocks
- Security packages for use in high theft areas
- Hard surface cleaning attachments (for wood, tile, marble, concrete, vct, etc.)
- Clean and Capture tools :  
*(Clean and capture is the process by which high pressure agitation and immediate extraction occurs within a closed tool head. This creates superior cleaning results with no run-off, over-spray, or cross-contamination.)*
- Pressure washing guns
- Mold and asbestos abatement systems available
- Closed loop cleaning systems
- In place soil / earth decontamination systems

## Who is PowerPlus?

Powerplus Professional Cleaning Solutions, is the world leader in decontamination, cleaning and restoration. With over twenty four years experience, we continue to achieve new standards for all industries concerned. As a company we welcome and appreciate comments from our clients and vendors. And we understand the need for prompt, reliable services for disaster clean ups such as hazmat, biohazards, fire, flood, mold and asbestos abatement, and remediation disasters.



# Clean & Capture

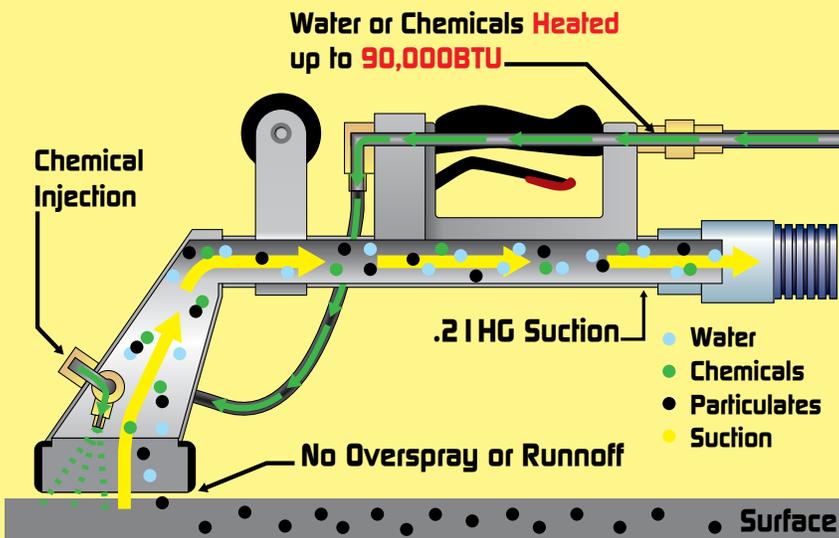


**CLEAN:** Each tool has nozzles that can spray water or any other chemical, while a powerful suction is generated with Prodigy Bio drawing all the particulates out of the surface you are cleaning and capturing them back in a holding tank and then treated.

**CAPTURE:** The oil and other particulates are captured with Clean and Capture then cleaned with our filtration system capable of producing a drinkable water solution. It can also leave surfaces in a near new condition after the deep cleaning.

**A Powerful combination:** The Prodigy Bio is a particularly powerful partner for this technology. With over 4000 PSI of pressure available, 21H.G. of suction, a stainless steel construction with a large holding tank, and the ability to run up to 1000 feet of hose, the Prodigy Bio makes the perfect combination for the Clean and Capture tools.

## 10,000 Cycles Per Second!



**WHAT IS CLEAN AND CAPTURE?** Clean and Capture is a proprietary technology of PowerPlus Professional Cleaning Solutions that utilizes heat, suction, pressure, and chemical properties to achieve a decontamination solution second to none. The PRODIGY BIO is completely integrated with this system that can provide a safe, inexpensive, way to reclaim contaminated areas.





# CES System



**CES (Contamination Extraction System):** is a culmination of technology and procedures. It is what allows *PowerPlus Cleaning Solutions* to clean soil, crops, and trees while maintaining the integrity of the surfaces being cleaned.

**Different:** CES is different in the fact that it is a complete solution and package. The technology ranges from knowing how to remove oil and contaminants from any surface, it also address environmental issues such as oil run-off, maintaining the eco- systems and helps the environment heal itself.

**Effective:** The CES system is all together effective and cost efficient. No scraping of the soil, no cutting trees down, no destroying homes and lives to remove the threat of oil contamination. Decontaminate in place and in the harshest conditions with CES.

## CES Value:

- Cost effective
- Environmentally friendly
- Proven technology
- Complete package
- Ground water protection
- High decontamination effectiveness
- No hazardous waste created
- Soil nutrients can be added in the process

## CES Components:

- Clean and Capture tools and technology
- Prodigy Bio
- C3 Technology
- S.O.V.C. Technology
- S.E.P. Technology
- CES - Procedures
- CES - PASS Software
- Oil/Water Separator





# Collection System

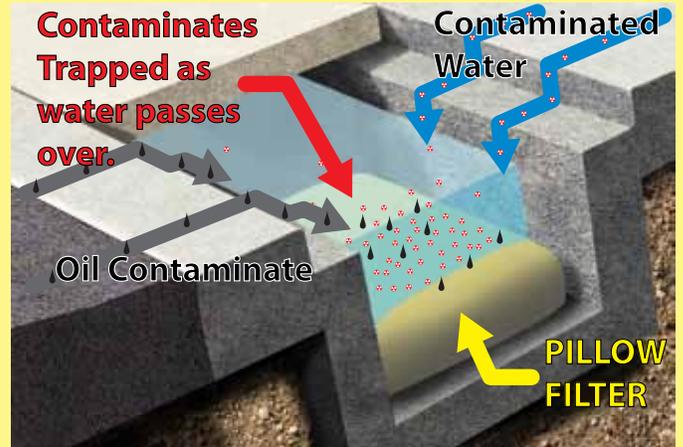
**RUNOFF:** is a big concern when it comes to decontamination clean up and a critical issue when it comes to water purification. Contaminants that are left in the water after being in any given environment are enough of a problem under normal conditions. Oil contamination complicates the cleaning process ten fold.

**STOP RUNOFF:** Our filters are specifically designed for large water flow. This filter is designed to be able to be dropped into any gutter, or more narrow water way where large or small amounts of contaminants like Oil or Solvents make their way into your water systems. As the low waters travel over, around, and through the filter, the contaminants are trapped inside the filter which can be replaced and reprocessed. With oil, many times you can write out the filter into your barrels for further processing while putting the filter right back into service. This means virtually no additional landfill waste will be created with this system!

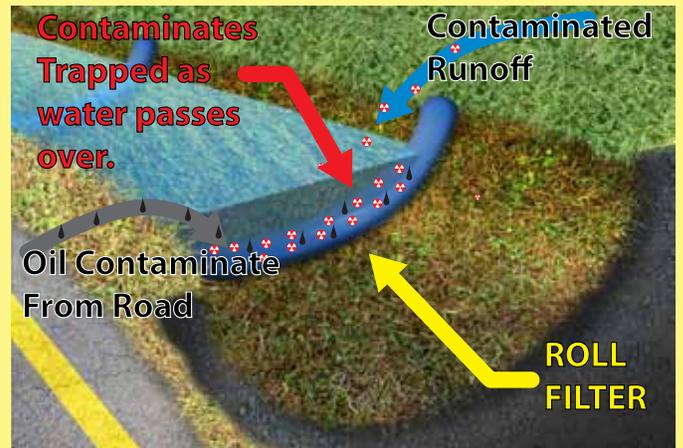
The current system is made up of three different filters all geared to maximize your protection.

**POWERPLUS DCU** DISASTER  
CLEANING SOLUTIONS CLEAN  
UP  
For more information or to order, call PowerPlus  
at (714) 635-9264

## PILLOW FILTER



## ROLL FILTER



## FILTER TYPES

### PILLOW FILTER:

This filter is designed to be able to be dropped into any gutter, or more narrow water way where large or small amounts of contaminants are trapped inside the filter which can be replaced and reprocessed. Simply drop in place and you are done! Size ( 30cm x 30cm x 5cm)

### BARRIER FILTER:

Designed to make a great first defense as they capture radiation, oil, and solvents filtering the water that travels into gutters. Size or (13cm x 2.1m)

### ROLL FILTER:

Sometimes your needs will mean a longer system or even a wider system might be needed and that is where this system fills the gap. We can make long rolled versions of our filter system to better fill ditches or gutters where a longer solution may be more advantageous. Size ( 13cm x 3m)



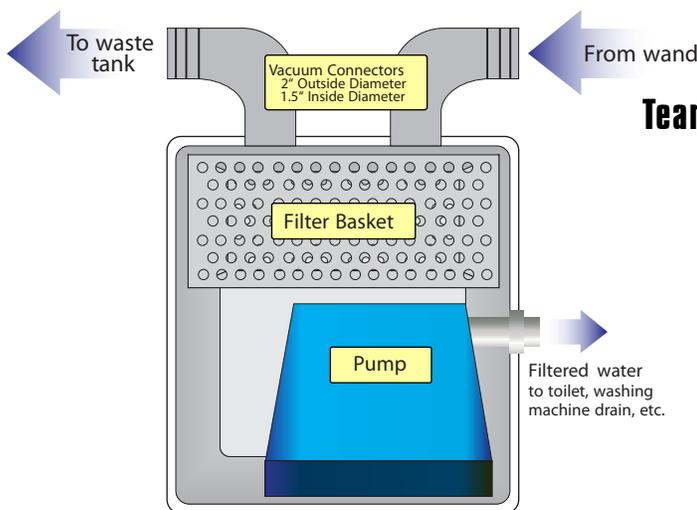
# auto pump-out



**First response:** Being able to remove water as fast as possible is always an immediate concern when it comes to flood and water damaged sites. You need to be able to get the surfaces exposed to air and start cleaning and drying them as soon as possible. With the Auto Pump-Out from PowerPlus, you can remove a baseline amount of 1500 gallons per minute with an optional larger unit of 6000 gallons per minute for those really large disasters. As you are able to more quick to respond to flooding, mud slides, chemical spills, and the like, the better your results will be and the worry of continued exposure to contaminants will be much less.

**Safe Water:** The environment is important to everyone as is the need to keep contaminants out of our drinking water and soil. The Auto Pump-Out has built in filters that meet US city standards that regulate waste dumping. This means that you are getting clean water out of this system when you use it! This pump is fantastic from small to large disasters that can occur.

## How does the Auto Pump-Out work?

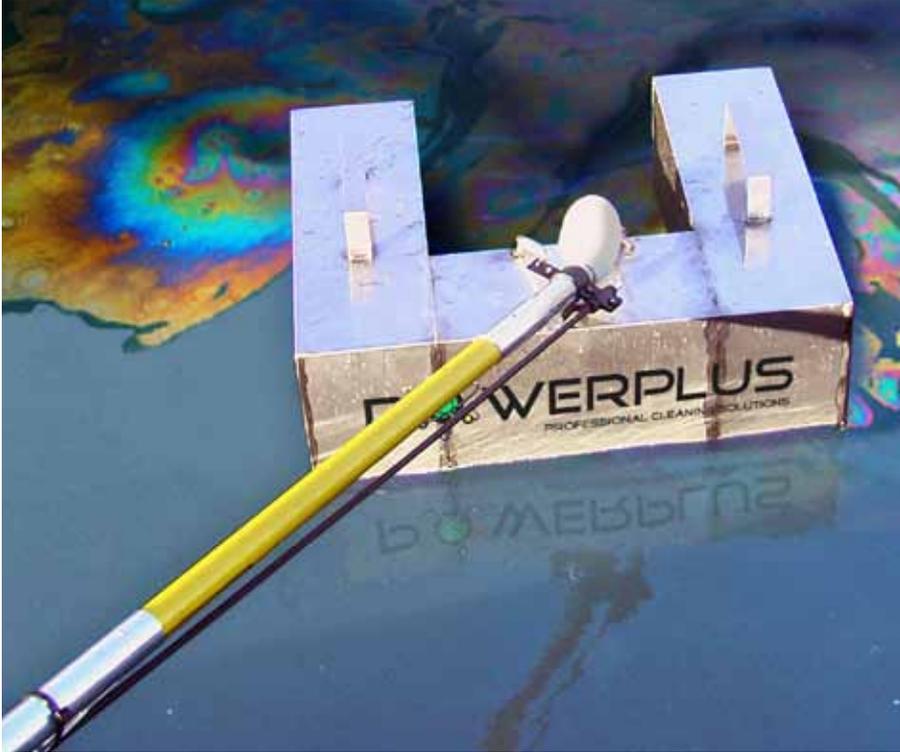


**Team it up:** The auto pump-out is a great first line defense against contaminants getting back into water supplies and soil. And it is the perfect counter part to our larger D.C.U. Filters which can give you drinking water out of nuclear contaminated water. Pairing the two will extend the longevity of your D.C.U. Filters as a pre-filter.

In a word, **Explanation:** The Auto Pump-Out connects in line with your vacuum hose. The 1,500 - 6,000 gallon per hour pump pulls waste water through the stainless steel filter and pushes it out the filtered water output valve. The Auto-Pump disposes almost all of the waste water before it enters the waste tank enabling you to work all day without stopping to drain your tank.



# weir skimmer



**Steer-able:** Allows head steering to come into close proximity to reeds, banks, nests, tight alcoves, and hard to reach areas without damaging the ecosystem of delicate wildlife.

**Worker Safety:** The steer able extension pole system on the **PowerPlus Weir** keeps workers safely on a boat or onshore, away from water and any potential wildlife attacks. The **PowerPlus Weir** system uses a 8-36ft extension pole system keeping workers safely away from dangerous animals or features.

**Wash-Down Attachment:** The PowerPlus Weir Wash-Down Attachment rinses oil/ contamination from weeds, banks, nesting area etc. with warm water into the recovery head of the PowerPlus Weir. This manages the otherwise impossible task of Decontaminating plant life that has oil/contaminants attached to them, including low tide exposure of below water level contaminants. This also is huge as most contaminates/oil will attach to such surfaces and no other viable decontamination method is available without shooting oil/contaminants back into the water, causing emulsification and cross contamination right back into neighboring wildlife.

**Throttled Oil Recovery:** This Patent Pending Technology allows the operator to adjust the slice and amount of oil/water mixture captured, all controlled on the fly at the operator end of the tool. An operational range of 0-2in water surface depth can be utilized, reducing unnecessary water collection up to 98%. This increases usable decontamination time by a factor of 50 and reduces waste to only 2-5%. This is a huge Benefit!

**Proven in the field:** The **PowerPlus Weir Skimmer** was put to the test along with other products from PowerPlus during the BP oil spill. This tool has been essential in the clean up and continued maintenance of marshes, estuaries, and waterfronts that were affected by the BP spill.

**Wildlife Safety:** The steer-able PowerPlus Weir keeps large distances between delicate wildlife and humans, reducing wildlife stress and trauma. This is a far more delicate eco friendly remediation technique allowing for detailed work while minimizing animal stress by having the ability to adjust the pole from 8-36 feet.

**Nighttime Operation:** Optional nighttime Running lights allow for 24 hours a day 7 days a week decontamination for its operators.



**PowerPlus Prodigy Bio:** can run 6 **PowerPlus Weirs** at a time. For most small boat based remediation, we recommend 3-4 **PowerPlus Weirs** due to deck space constraints.

# POWERPLUS CLEANING SOLUTIONS

## WE ARE READY TO MOVE.

PowerPlus is standing by with equipment and personnel ready to move when you are! Let us put our years of expertise and know how to work for your country and remove the contaminants that keep you from enjoying your lands freely.



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