



# SOME FACTS OF THE PHARMA INDUSTRY & WASTE WE GENERATE IN INDIA

- ☛ The Pharmaceutical industry is one of the fastest growing segments of the Indian Economy and has experienced rapid and sustained expansion since the second half of the 20th Century. The market is expected to grow to \$ 100 billion by 2025.
- ☛ India's Environment Ministry classifies pharmaceutical manufacturing on a 'Red Category' activity owing to the hazardous waste it produces
- ☛ The Pharma waste generated from the manufacturing process is responsible for Negative Environmental footprint with the generation of SOLID, LIQUID & AIRBORNE Waste in the Environment

**The Pharmaceutical Manufacturer has the responsibility to foster environmental Sustainability and reduce pharmaceutical pollution at source & throughout their supply chain.**

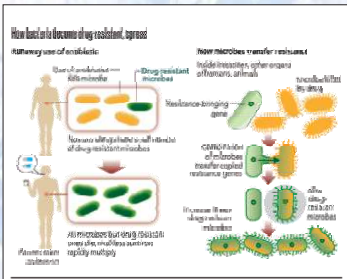




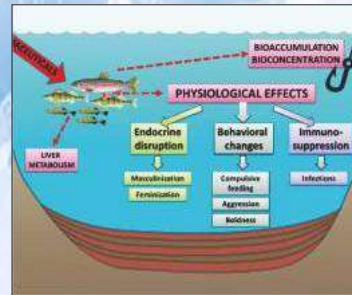


# Are we Ready for the Change?

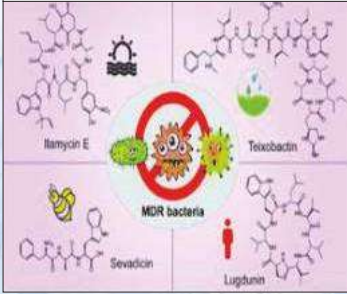
The faster we take the Responsibility to reduce Pharmaceutical Pollution the lesser we damage the environment.



Extensive usage and improper disposal of pharmaceutical drugs cause spreading of Multi-drug resistant microbes.



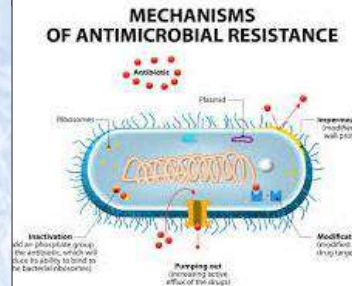
Near Elimination of entire species & feminisation of fish



Some Pharma Companies are dumping Toxic Waste in the Environment



Spread of Anti Microbial Resistance (AMR) a major global health threat.



Pharma Boom or bane. In Hyderabad, gandigudem lake in Patancheru district pollution from pharma plants let to the death of 2,30,000 fish due to chemical toxicity.





# Are You Ready for the Change?

Commit to proper disposal of un used, unwanted (EDOU) expired date of use of medicines, detect duplicate, spurious counterfiet drugs across the supply chain

## Sustainable solution for Pharma Waste at the point of generation



**BEAT THE PHARMA POLLUTION  
AT THE POINT OF GENERATION**





BE THE CHANGE FACTOR  
 BY  
 PROPER COLLECTION OF PHARMA WASTE  
 FROM ALL SOURCES TO MANUFACTURING PLANT  
 PROPER IDENTIFICATION OF ALL REJECTED PHARMA PRODUCTS  
 DURING MANUFACTURING  
 PROPER IDENTIFICATION & COLLECTION OF  
 ALL PHARMA PACKAGING WASTE & PRODUCT LITERATURE  
 LIKE LABELS, STICKERS & INSTRUCTIONS  
 &  
 SHRED THE PHARMA WASTE  
 SHRED & SEGREGATE  
 TO  
 REDUCE, RECYCLE & RE USE



It is estimated that SFFC Drugs (Spurious/falsely labelled / falsified / counterfeit drugs leads to treatment failure or even death and is about 1/6 of the total sales turnover of the popular brands

Adverse effect of Duplicate products market size of global pharma industry is \$ 1072 billion.

Globally counterfeit medicines claim over 1,00,000 lives, & \$ 200 billion counterfeit drugs are sold.

In India it is expected to reach \$ 55 billion by 2020

It is an estimated that one in 10 medical products circulating in low and middle income countries is either substandard or falsified, according to research by the WHO IN Nov 2017







Range of shredders for Pharma Waste can be installed at the point of generation, Segregation and Disposal of Pharma Waste.

Comply with the Ministry of Bio-Medical Waste Management Rules 2016 of Environment Ministry and implemented by Pollution Control Board of the State Governments and implement GMP, EOHS in your Manufacturing facility. Segregate, Shred and Recycle your Pharma Waste at Source



### Waste Management Solutions

#### PHARMA PACKAGING WASTE

- ☛ Cartoons
- ☛ Corrugated Boxes
- ☛ Shippers
- ☛ Duplex Boxes
- ☛ Syrup Packaging Box
- ☛ Card Board Box
- ☛ Printed Carton
- ☛ Thermocol Box
- ☛ Labels
- ☛ Stickers
- ☛ Instruction Inserts (folded paper of 30 mm thick)
- ☛ Formulation Documents etc.



#### CAN BE INSTALLED IN

- ☛ Manufacturing facilities of Pharmaceutical Companies
- ☛ Sub Contracted Manufacturing facilities of Pharmaceutical Companies
- ☛ Thrash Bays of Pharmaceutical Companies
- ☛ Major Stock Points of Pharmaceutical Companies.
- ☛ Thrash Bays of Pharmaceutical Distributors
- ☛ Third Party Manufacturing facilities of Pharma Products

#### PHARMA WASTE

Rejected & Expired Tablets & Capsules, Blisters, Sachets with Powder. Glass Vials Ampoules & Bottles with Liquid Drug. Plastic (HDPE) vials Ampoules and Bottles with liquid drug, Plastic & Aluminium Tubes



**BEAT THE PHARMA POLLUTION AT THE POINT OF GENERATION**





Now you have the power to change things choose **NxGen** as your ideal partner to implement Bio Medical Waste Management Rules 2016, GMP & EOHS initiatives in large scale with quality, quantity, technology & within time frame. Meet Compliances of statutory practices. Safeguard your **BRAND IMAGE** by proper waste management.



HS 404



HS 409



PS 1000 C

**Multi purpose Packaging Material & Departmental / Heavyduty / High capacity Shredder with Hopper**



Suitable for Shredding Pharma Packaging Waste Cartoons, Corrugated Boxes, Shippers, Duplex Boxes, Syrup Packaging Box, Paper Packaging Box, Card Board Box, Printed Cartoon, Thermocol Box



PS 409



PS 409 HU

**Multi purpose Packaging Material & Departmental Heavy duty Shredder with Hopper. Industrial Heavy Duty Shredder with Hopper**



Suitable for Shredding Labels, Stickers & Instruction inserts (folded paper of 30 mm thick) formulation Documents etc.



MR 300

**Packaged Material Recovery Plant (Shredder with Segregator)**



Suitable for shredding and Separating the packaging waste and pharma waste up to 95-98% Tablets & Capsules (Rejected & Expired) Blisters, Sachets with Powder





BC 300 BC 400 BS 400 COMBO

ES 5012

**Bottle Crushers,**  
 Combo Bottle crusher & Plastic bottles shredder, Automated shredding solutions with automated feeding, high volume shredding and separation of solid and liquid waste (Shredder, Conveyor & Vibro separation)  
 Available in partial SS & GMP Models



Suitable for shredding Glass Vials  
 Ampoules Bottles with liquid drug



BS 300

BS 400

ES-5012

**Bottle Shredders**  
 Automated shredding solutions with automated feeding, high volume shredding and separation of solid and liquid waste  
 (Shredder, Conveyor & Vibro separation)  
 Available in partial SS & GMP Models



Suitable for shredding Plastic (HDPE) Vials,  
 Ampoules and Bottles with liquid drug



BS 400

MS4050

**Bottle Shredders**  
 Available in partial SS & GMP Models



Suitable for shredding Plastic & Aluminium tubes and plastic bottles, Aerosal container Alu-alu.





**PS 402 G**

High Speed, High Out Heavy Duty Document Shredder



Paper with Paper Clips & Staples, thick paper, glassians packed, Expired Medicines outerCartoons



**BS 300**

Bottle Shredder



Lamitubes, empty foil / blisters



**MS 5010**

Multiple Waste Shredder



PVC & Alu-Alu material filled or empty  
Lamitubes filled or empty  
Aluminium tube with latex sealant layer & FEZ screw cap.  
HDPE flat, oval & Round bottles with cap, plug & dripper



**BS 300 S**

Syringes Shredder



Rejected, Misprinted Dispovan Syringes



**MS 5010, MS 5012**

Multiple Waste Shredders customised for Aerosal filled containers with safety features.



PVC & Alu-Alu Material, HDPE Containers, Aerosal Container

Note: The models are recommended as per sample. Check back with Team **NxGen Innovations** for selection of appropriate model.





Segregate Hazardous Waste from Recyclable Waste and get Revenue

Automated Shredding / Crushing Plants for Vials / Bottles  
with separation of hazardous liquid from recyclable waste

**SHREDDING PLANT for Glass Vials and Bottles Shredding**  
(with stoppers and aluminium seals)

for Glass vials and Bottles of 10 ml to 200 ml (of 10 mm to 50 mm dia) with  
Conveyer feeding and Vibro-separator for liquid separation

Available in partial SS & GMP Models



ES-5012

Can Shred / crush...







Segregate Hazardous Waste from Recyclable Waste and get Revenue

Automated Shredding Plants for Vials / Bottles  
with separation of hazardous liquid from recyclable waste

**SHREDDING PLANT for Plastic Vials and Bottles  
(with stoppers and aluminium seals)**

for Plastic Vials and Bottles of 10 ml to 200 ml (of 10 mm to 50 mm  
dia) with Conveyer feeding and Vibro-separator for liquid separation

Available in partial SS & GMP Models



Can Shred .....





Segregate Hazardous Waste from Recyclable Waste and get Revenue

Packaged Material Recovery Plant  
Shredding with Segregation  
of  
Packaging Waste and Pharma Hazardous Waste  
upto 95-98% of Tablets & Capsules (Rejected & Expired)  
Blisters, Sachets with Powder  
Available in partial SS, Washable and GMP Models

**PACKAGED TABLETS & CAPSULES**



TABLET POWDER

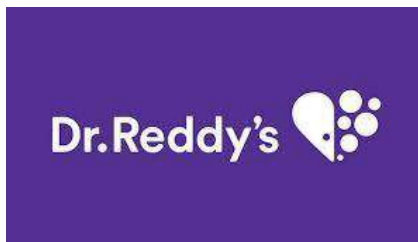
PACKING WASTE

MR 300



# Leading Brands

NxGen Innovations represent AVANTI who is privileged to partner with the leading pharma companies for proper disposal of pharma packaging and pharma waste products w.r.t expired use dates, quality rejections, Misprinted packaging, product returns and manuals & instructions to effectively handle duplicate products & counterfeit drugs across the supply chain



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