

# Tackling India's Growing Toxic Waste

By **Sarita Gupta**

Ever wonder what happened to that old computer you junked or that dead car battery? Chances are they were transported thousands of miles to a developing country where poor people make a living from extracting lead and other metals from discarded items. Recycling e-waste might be economically productive but exacts a huge environmental and health toll when toxins and heavy metals are dumped improperly, often right in the same communities as the workers. The result is millions plagued with disease, disability and death.

I recently became involved with the [Blacksmith Institute](#), a nonprofit that is removing poisons from contaminated playgrounds, schools, homes and factories as well as large river systems and entire communities in the developing world. Blacksmith focuses on pollution that is acute and geographically confined as opposed to say, carbon emissions. The effects of this type of pollution are generally immediately felt and related to identifiable causes like pesticide runoff. They can usually be addressed at local or national levels.

During a trip to India last month, I met with Blacksmith's national technical advisor, Dr. B. Sengupta. India has hundreds of thousands of poor people engaged in recycling e-waste and lead batteries. Add to that the numbers engaged in dyeing fabric or tanning leather or working in small smelters. In the US strict government regulation and monitoring would prevent a business from dumping toxins improperly. But in India, said Dr. Sengupta, anti-pollution laws exist mainly on paper. Instead of a few mega corporations as found here, India has over five million small and mid-sized industries, making monitoring virtually impossible.

According to Dr. Sengupta, India produces over eight million tons of toxic waste every year. The Indian government in the last 25 years has built 28 facilities for the proper transport, storage and disposal of toxic waste. These facilities however have the capacity to only handle one-half of the total.

The result is a four million ton problem that only promises to get worse with industrialization and population growth.

The Indian government to its credit is trying to address the problem. The Ministry of Environment & Forests has been allocated a significant amount in the current Indian budget to remediate polluted sites and the World Bank has stepped in with additional monies. Along with resources, there is strong expertise in India regarding pollution. However no complex remediation projects have yet been implemented and there is a dearth of state-of-the-art technical expertise and trained personnel to do so.

Enter Blacksmith Institute. The organization brings the best scientific practices from around the world and the latest and most cost-effective technologies to each project. It has a roster of senior experts with environmental health and engineering experience to address specific toxins and develop the appropriate remediation plan. The Ministry has invited Blacksmith to assist in site identification and the development of detailed remediation plans. It is a case of what I call 'optimal collaboration' between developed world expertise advancing

## Takeaways

- Ever wonder what happened to that old computer you junked or that dead car battery? Chances are they were transported thousands of miles to a developing country where poor people make a living from extracting lead and other metals from discarded items. Recycling e-waste might be economically productive but exacts a huge environmental and health toll when toxins and heavy metals are dumped improperly, often right in the same communities as the workers. The result is millions plagued with disease, disability and death.

I recently became involved with the [Blacksmith Institute](#), a nonprofit that is removing poisons from contaminated playgrounds, schools, homes and factories as well as large river systems and entire communities in the developing world. Blacksmith focuses on pollution that is acute and geographically confined as opposed to say, carbon emissions. The effects of this type of pollution are generally immediately felt and related to identifiable causes like pesticide runoff. They can usually be addressed at local or national levels.

During a trip to India last month, I met with Blacksmith's national technical advisor, Dr. B. Sengupta. India has hundreds of thousands of poor people engaged in recycling e-waste and lead batteries. Add to that the numbers engaged in dyeing fabric or tanning leather or working in small smelters. In the US strict government regulation and monitoring would prevent a

the agenda of a developing government committed to resolving its own problems.

Dr. Sengupta, who retired after 30 years of executive positions at the Central Pollution Control Board (akin to our EPA), is optimistic about India's future. The good news here, he says, is that toxic pollution *can* be cleaned up and stopped through regulation, community education and proven alternative and modern technologies. He is willing to battle killer heat, indifferent bureaucrats and strenuous travel to continue his lifelong quest of making India's environment safer and healthier. Just don't get him started on India's sewage problem.

embed id=VideoPlayback src=http://video.google.com  
/googleplayer.swf?docid=5944615355863607664&hl=en&fs=true  
style=width:400px;height:326px allowFullScreen=true  
allowScriptAccess=always type=application/x-shockwave-flash

### More resources

- embed id=VideoPlayback src=http://video.google.com  
/googleplayer.swf?docid=5944615355863607664&hl=en&fs=true  
style=width:400px;height:326px allowFullScreen=true  
allowScriptAccess=always type=application/x-shockwave-flash

2011 © Associated Content, All rights reserved.  
[Privacy Policy](#) | [Terms of Service](#)

business from dumping toxins improperly. But in India, said Dr. Sengupta, anti-pollution laws exist mainly on paper. Instead of a few mega corporations as found here, India has over five million small and mid-sized industries, making monitoring virtually impossible. According to Dr. Sengupta, India produces over eight million tons of toxic waste every year. The Indian government in the last 25 years has built 28 facilities for the proper transport, storage and disposal of toxic waste. These facilities however have the capacity to only handle one-half of the total. The result is a four million ton problem that only promises to get worse with industrialization and population growth.

The Indian government to its credit is trying to address the problem. The Ministry of Environment & Forests has been allocated a significant amount in the current Indian budget to remediate polluted sites and the World Bank has stepped in with additional monies. Along with resources, there is strong expertise in India regarding pollution. However no complex remediation projects have yet been implemented and there is a dearth of state-of-the-art technical expertise and trained personnel to do so. Enter Blacksmith Institute. The organization brings the best scientific practices from around the world and the latest and most cost-effective technologies to each project. It has a roster of senior experts with environmental health and engineering experience to address specific toxins and develop the appropriate remediation plan. The Ministry has invited Blacksmith to assist in site identification and the development of detailed remediation plans. It is a case of what I call 'optimal collaboration'

between developed world expertise advancing the agenda of a developing government committed to resolving its own problems.

Dr. Sengupta, who retired after 30 years of executive positions at the Central Pollution Control Board (akin to our EPA), is optimistic about India's future. The good news here, he says, is that toxic pollution *can* be cleaned up and stopped through regulation, community education and proven alternative and modern technologies. He is willing to battle killer heat, indifferent bureaucrats and strenuous travel to continue his lifelong quest of making India's environment safer and healthier. Just don't get him started on India's sewage problem.

- Ever wonder what happened to that old computer you junked or that dead car battery? Chances are they were transported thousands of miles to a developing country where poor people make a living from extracting lead and other metals from discarded items. Recycling e-waste might be economically productive but exacts a huge environmental and health toll when toxins and heavy metals are dumped improperly, often right in the same communities as the workers. The result is millions plagued with disease, disability and death.

I recently became involved with the [Blacksmith Institute](#), a nonprofit that is removing poisons from contaminated playgrounds, schools, homes and factories as well as large river systems and entire communities in the developing world. Blacksmith focuses on pollution that is acute and geographically confined as opposed to say, carbon emissions. The effects of this type of pollution are generally immediately felt and related to identifiable causes like pesticide

runoff. They can usually be addressed at local or national levels.

During a trip to India last month, I met with Blacksmith's national technical advisor, Dr. B.

Sengupta. India has hundreds of thousands of poor people engaged in recycling e-waste and lead batteries. Add to that the numbers engaged in dyeing fabric or tanning leather or working in small smelters. In the US strict government regulation and monitoring would prevent a business from dumping toxins improperly. But in India, said Dr. Sengupta, anti-pollution laws exist mainly on paper. Instead of a few mega corporations as found here, India has over five million small and mid-sized industries, making monitoring virtually impossible.

According to Dr. Sengupta, India produces over eight million tons of toxic waste every year. The Indian government in the last 25 years has built 28 facilities for the proper transport, storage and disposal of toxic waste.

These facilities however have the capacity to only handle one-half of the total.

The result is a four million ton problem that only promises to get worse with industrialization and population growth.

The Indian government to its credit is trying to address the problem. The Ministry of Environment & Forests has been allocated a significant amount in the current Indian budget to remediate polluted sites and the World Bank has stepped in with additional monies. Along with resources, there is strong expertise in India regarding pollution. However no complex remediation projects have yet been implemented and there is a dearth of state-of-the-art technical expertise and trained personnel to do so.

Enter Blacksmith Institute. The organization brings the best scientific practices from around

the world and the latest and most cost-effective technologies to each project. It has a roster of senior experts with environmental health and engineering experience to address specific toxins and develop the appropriate remediation plan. The Ministry has invited Blacksmith to assist in site identification and the development of detailed remediation plans. It is a case of what I call 'optimal collaboration' between developed world expertise advancing the agenda of a developing government committed to resolving its own problems.

Dr. Sengupta, who retired after 30 years of executive positions at the Central Pollution Control Board (akin to our EPA), is optimistic about India's future. The good news here, he says, is that toxic pollution *can* be cleaned up and stopped through regulation, community education and proven alternative and modern technologies. He is willing to battle killer heat, indifferent bureaucrats and strenuous travel to continue his lifelong quest of making India's environment safer and healthier. Just don't get him started on India's sewage problem.

- Ever wonder what happened to that old computer you junked or that dead car battery? Chances are they were transported thousands of miles to a developing country where poor people make a living from extracting lead and other metals from discarded items. Recycling e-waste might be economically productive but exacts a huge environmental and health toll when toxins and heavy metals are dumped improperly, often right in the same communities as the workers. The result is millions plagued with disease, disability and death.

I recently became involved with the [Blacksmith Institute](#), a

nonprofit that is removing poisons from contaminated playgrounds, schools, homes and factories as well as large river systems and entire communities in the developing world. Blacksmith focuses on pollution that is acute and geographically confined as opposed to say, carbon emissions. The effects of this type of pollution are generally immediately felt and related to identifiable causes like pesticide runoff. They can usually be addressed at local or national levels.

During a trip to India last month, I met with Blacksmith's national technical advisor, Dr. B. Sengupta. India has hundreds of thousands of poor people engaged in recycling e-waste and lead batteries. Add to that the numbers engaged in dyeing fabric or tanning leather or working in small smelters. In the US strict government regulation and monitoring would prevent a business from dumping toxins improperly. But in India, said Dr. Sengupta, anti-pollution laws exist mainly on paper. Instead of a few mega corporations as found here, India has over five million small and mid-sized industries, making monitoring virtually impossible.

According to Dr. Sengupta, India produces over eight million tons of toxic waste every year. The Indian government in the last 25 years has built 28 facilities for the proper transport, storage and disposal of toxic waste. These facilities however have the capacity to only handle one-half of the total.

The result is a four million ton problem that only promises to get worse with industrialization and population growth.

The Indian government to its credit is trying to address the problem. The Ministry of Environment & Forests has been allocated a significant amount in the current Indian budget to

remediate polluted sites and the World Bank has stepped in with additional monies. Along with resources, there is strong expertise in India regarding pollution. However no complex remediation projects have yet been implemented and there is a dearth of state-of-the-art technical expertise and trained personnel to do so.

Enter Blacksmith Institute. The organization brings the best scientific practices from around the world and the latest and most cost-effective technologies to each project. It has a roster of senior experts with environmental health and engineering experience to address specific toxins and develop the appropriate remediation plan. The Ministry has invited Blacksmith to assist in site identification and the development of detailed remediation plans. It is a case of what I call 'optimal collaboration' between developed world expertise advancing the agenda of a developing government committed to resolving its own problems.

Dr. Sengupta, who retired after 30 years of executive positions at the Central Pollution Control Board (akin to our EPA), is optimistic about India's future. The good news here, he says, is that toxic pollution *can* be cleaned up and stopped through regulation, community education and proven alternative and modern technologies. He is willing to battle killer heat, indifferent bureaucrats and strenuous travel to continue his lifelong quest of making India's environment safer and healthier. Just don't get him started on India's sewage problem.