

#### **OUR UPDATED MISSION**



Pure Earth saves and improves lives, particularly lives of children in poor communities, by reducing disease-causing pollution. We identify toxic hot spots and teach communities how to improve soil, water and air quality with cost-effective solutions. This field work, combined with our groundbreaking research and advocacy, elevates pollution as a global priority.

Boy overlooking polluted water in a tannery village in India.

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#### **HOW WE DO IT**

Founded in 1999 by entrepreneur and environmentalist Richard Fuller, Pure Earth creates a healthier world by reducing disease-causing pollution at the local level and preventing the spread of contaminated soil, water and air.



### FIND IT

Find disease-causing pollution by identifying toxic sites and health-harming work practices.



### FIX IT

Fix disease-causing pollution by using the most impactful and cost-effective strategies to clean toxic sites and improve work practices.



### **FOLLOW IT**

Follow disease-causing pollution, researching how it crosses international boundaries and impacts human health.



### **FUND IT**

Seek funds to support expansion of our life saving work from governments, private foundations, corporations and individuals.

Cover Photo: Young girls working in e-waste burning fields; Agbogbloshie, Ghana





#### Letter from the Chair of the Board

The 2017 release of The Lancet Commission on Pollution and Health Report, spearheaded by Pure Earth, represented a milestone for us and a crossroads for pollution. The report's findings and recommendations generated extraordinary attention reaching 2 billion people, ranging from families concerned about life-threatening levels of lead in their children's bodies to Ministers of Environment, Health, and Finance ready to take action.

Building upon this, Pure Earth undertook a strategic planning process to determine how to best leverage this new-found visibility and interest in action. We updated our vision and mission statements to reflect Pure Earth's evolving strategy and program priorities, which include:

- Innovative country-specific Health and Pollution Action Plans (HPAP)
- Grassroots education and communications campaigns
- Pilot projects addressing toxic livelihoods and contaminated hot spots
- Targeted advocacy and research on understudied toxins threatening our health
- New vision statement:
   Reduce Pollution
   Save Lives
   Protect the Planet

#### **Updated Mission**

- Pure Earth saves and improves lives, particularly lives of children in poor communities, by reducing disease-causing pollution.
- We identify toxic hot spots and teach communities how to improve soil, water and air quality with cost-effective solutions.
- This field work, combined with our groundbreaking research and advocacy, elevates pollution as a global priority.

In this Annual Report you will learn how our efforts are directly impacting at-risk families and children, policy-makers, environmental and health professionals, responsible corporations and caring global citizens.

Together, we truly can reduce pollution, save lives and protect the planet!

Sincerely,

40/8

**H. Conrad Meyer III** Chair

#### Letter from the President

I founded Pure Earth almost 20 years ago, and 2017 will be etched in my memory as the pivotal turning point in attention to the global pollution issue. The Lancet Commission on Pollution and Health had far more impact than we anticipated. With a documented media reach of 2 billion people, it is a global mandate for action to stem the pollution crisis.

Throughout 2017 and 2018, we witnessed action and change unfold:

- The third UN Environment Assembly focused exclusively on pollution. Over 20 country delegations sought us out in Nairobi to participate in the Health and Pollution Action Planning process to define and prioritize pollution solutions.
- The World Bank hosted a briefing endorsing the Lancet Commission's recommendations and encouraged the international development community to join the Bank and make pollution a top priority.

- I was invited to present the results of the Commission at the World Economic Forum (WEF) in Davos; WEF formed a Global Battery Alliance to address the global lead poisoning crisis caused by informal recycling of car batteries.
- World Health Organization (WHO) and the United Nations Environmental Programme (UNEP) announced a conference on air pollution and health using the key messages from The Lancet Commission.

We can build upon this unprecedented momentum. Your generous support enables us to train communities to find toxic hot spots, cleanup their contaminated homes and workspaces, push governments to prioritize disease-causing pollution and make sure the media continues to cover this public health crisis.

Thank you for being part of the solution.

Sincerely,

**Richard Fuller**President



# Campaign for 10 Million Lives

Pollution is the leading cause of death on the planet, so why is environmental health attracting only 0.0002% of US philanthropic dollars?

Some of the key reasons are:

- Lack of awareness of the scope of the problem and the cost-effective solutions at hand.
- Lack of data on the true impact of toxins on human health and the economy.
- **Simply falling through the cracks** of man-made silos such as environment, health, human rights and sustainable development.

The good news is that The Lancet Commission on Pollution and Health, spearheaded by Pure Earth, moved the needle on addressing these fundamental issues.



Imagine the lives saved and the children who will grow up with their full mental capacities when we stem the devastating effects of poisoning from lead, mercury, and other deadly pollutants.

The private sector is beginning to step up, and governments and public agencies are re-visiting their priorities.

For individuals, corporations, and foundations who have joined Pure Earth's Campaign for 10 Million Lives, they are supporting the real solutions and change promoted by The Lancet Commission.

Over this past year, Pure Earth has proven to be a catalyst for change on multiple fronts: in the field, in the media, in research and in advocacy.

### The Campaign has raised more than \$3,000,000.

Now is the time to accelerate private investment and make pollution solutions a top priority. We all deserve to live on a Pure Earth.

Thank you for your support and caring.

#### Thank you for reading this annual report.



Charlotte Triefus Co-chair



Sheldon Kasowitz Co-chair

You and all our supporters make this work possible. As you will see, Pure Earth engages world leaders, conducts clean-ups, attract media attention, generates research, and advocates for the many millions whose health is compromised by pollution.

magine the lives saved and the children who will grow up with heir full mental capacities when we stem the devastating effects of poisoning from lead, mercury, and other deadly pollutants.

This is the goal of Pure Earth's Campaign for 10 Million Lives, which has already raised more than \$3 million and affected tens of thousands of children. We are excited to highlight three of our generous and visionary funders:

- Ira and Diana Riklis through a multi-year gift are fighting widespread childhood lead poisoning caused by unsafe used lead-acid battery recycling in India;
- Oak Foundation funded Health and Pollution Action Plans in Bangladesh, Indonesia, Madagascar, and Thailand; and
- Long time supporter, HSBC, in addition to supporting employee-leadern-ups of polluted rivers in Manila, expanded their vision to address lead poisoning caused by traditional lead-glazed potters in Mexico.

et us all be a part of the solution. Help expose the magnitude f pollution-related death and illness and parlay awareness into unding remedies and policy changes. Pure Earth is the catalyst, roviding the essential facts and proven pathways to give industry, governments, and public agencies the means to change thei riorities. An introduction by you to potential contributors will reatly magnify Pure Earth's reach.

Your support literally saves lives.

Sincerely

Charlotte Triefus 8 Sheldon Kasowitz Co-chairs, Campaign For 10 Million Live



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### Key Accomplishments in 2017



"No country is unaffected by pollution. Human activities including industrialisation, urbanisation, and globalisation, are all drivers of pollution...

We hope that the findings and recommendations from this Lancet Commission will also marshal action in the health and development sectors, and persuade leaders at the national, state, provincial, and city levels to make pollution a priority. Although there is some activity on pollution internationally, much more is needed... This Lancet Commission should inform policy makers and serve as a timely call to action.

Pollution is a winnable battle."

**Dr Richard Horton**—Editor-in-Chief, The Lancet **Dr Pamela Das**—Senior Executive Editor, The Lancet

The Lancet Commission on Pollution and Health

After two and a half years of intense work, The Lancet Commission on Pollution and Health, co-chaired by Pure Earth President Richard Fuller and Dr. Philip Landrigan, was published in October 2017. This landmark report generated intense global interest, with news of the Commission's findings and recommendations reaching 2 billion people worldwide through 3,500 stories on TV, radio, print, websites and social media.

Briefings on the Commission's findings were held around the globe hosted by multiple Commissioners in New York, Brussels, Ottawa, Delhi, Doha, Qatar, Davos, Switzerland, Beijing, Shanghai, World Bank HQ in Washington DC, and UN Environment offices in Nairobi.

The Pure Earth team built upon the momentum of The Lancet Commission report with its work on the frontlines -- expanding to new countries and leveraging successful pilots into additional projects in Vietnam and Azerbaijan.

#### THE FINDINGS OF THE COMMISSION SHOCKED AND CAPTIVATED THE WORLD;

DEATHS

Pollution in the air, water and soil kills 9 million people every year

7%

Pollution-related diseases account for up to 7% healthcare costs

tion and Health is doing for pollu-

Daniel Calleja

**92**%

22% of these deaths occur in low- and niddle-income countrie

4.6

Pollution drains \$4.6 trillion of global GDP in welfare costs.



#### Cleanups

In 2017, five cleanup projects were completed and another five were in progress and will continue in 2018.

### Toxic Site Identification Program (TSIP)

This year, our TSIP protocol was improved through a peer-review process supported by the World Bank, and a rebuild of the database has resulted in stronger tools to find, measure and cleanup toxic hotspots.

In 2017, Pure Earth TSIP teams assessed 242 sites in 17 countries. These sites collectively pose a threat to the health of 700,000 people. We also ran new investigator training programs in six countries - Bolivia, Brazil, Colombia, the Philippines, Vietnam and India - educating 93 professionals in toxic site assessment methods.

### Health & Pollution Action Plans (HPAP)

The Health and Pollution Action Planning (HPAP) program moved forward in 2017. Using country level data and analyses compiled by The Lancet Commission on Pollution and Health, we convened cross-ministerial work groups at the national level to analyze and prioritize pollution problems and begin crafting a pollution solutions roadmap.

Twenty additional countries have submitted requests to begin the HPAP process in 2018. Seed funding from USAID and the Oak Foundation enabled Pure Earth staff to begin the HPAP process in Colombia, Indonesia, Thailand, and Madagascar. UNIDO has adopted the HPAP program and is running workshops in Ghana and the Philippines.

# Cleanup Projects

The Pure Earth team kept up the momentum in 2017, expanding to new countries and leveraging successful pilots into additional projects in Vietnam and Azerbaijan.

"We also need to help other countries, not only for the benefit it will bring them, but pollution knows no boundaries and we must all work together to address the challenges that pollution poses to our health and the health of our planet."

#### Gina McCarthy

Director of the Center for Health and the Global Environment at the Harvard T.H. Chan School of Public Health, Former U.S. EPA Administrator



Pure Earth completed a cleanup of an infamous pesticide dump site on the Sumgayit Peninsula.

The contaminated site at Salyan was a former storage facility for pesticides and fertilizers. When the building that housed the pesticides was demolished in 1990, the abandoned pesticides were just left behind or scattered around the site, exposed to the elements. Over the years, hundreds of the metal drums deteriorated and began leaking. We found many containers half empty of their toxic contents.

Among the highly toxic substances documented at the site were DDT, Polydofen, Granozan, Zineb, and HCH, which we found in both liquid and powdered form.

For nearly three decades, these highly toxic pesticides were exposed to the elements. They seeped into the ground and were scattered about by rain and wind.

Families living nearby were exposed to the toxic vapors and contaminated dust and soil. Many complained of headaches and the smell of DDT.

Not only did the Pure Earth team manage to clean up the site, but they also accomplished the task in record time, in part due to the close working relationships the local Pure Earth team, lead by Peter Sharov, had established with all the stakeholders. They included the Ministry of Agriculture, the Ministry of Ecology and Natural Resources, Salyan Municipality, the landowner, and the Janggi Pesticide Polygon, where all the toxic materials were transported.

#### PROJECT LEVERAGE

This cleanup was Pure Earth's second in Azerbaijan. Pure Earth had previously transformed a toxic beach into a beautiful seaside park.

With two successful projects completed, the government and major corporate stakeholders are discussing additional cleanups throughout the country.

#### NAIMAN, KYRGYZSTAN

The village of Naiman was contaminated by liquid mercury dumped into a drainage canal and dispersed throughout the village. Beads of quicksilver mercury were evident on the surface of the soil. Our team removed the mercury-contaminated soil, restoring the environment and removing the health threat to children playing in the area.











#### MALAMBO, COLOMBIA

A study conducted by Universidad Naciónal de Colombia revealed high lead levels in all students attending La Bonga Elementary School. Located in Malambo, Colombia, the school sits in a community where three former lead smelters, now abandoned caused high levels of contamination and severe health problems. One of the three former smelters was very close to the school, and became the priority site for a cleanup.

The site closest to the school is now cleaned up and two more remain.

Education is always the first step in an intervention. The Colombia team created a comic book to teach children how to protect themselves against a villain called "lead man". They also employed puppet shows, songs and games. Parents and other adults in the community also attended education sessions where they learned about the risks of lead exposure and how to protect themselves and their children.

The Pure Earth team in Malambo discovered that families living closest to the lead smelter – including 50 children - were sleeping on highly contaminated mattresses every night.

#### FAMILY STORY

Siblings Hilary, age 2, and Juan, age 4, shared a mattress that measured over 1300 parts per million of lead. Lead particles from years of smelter operations were lodged in the mattresses, delivering nightly toxic doses. Pure Earth worked with USAID to replace the most contaminated mattresses. Parents were trained on home cleaning methods to remove lead dust. The family is looking forward to many nights of sweet, toxic-free dreams.

#### PROJECT LEVERAGE

Pure Earth established a strong infrastructure over the past two years. We hired a well-respected country coordinator, Alfonso Rodriguez. We built a network of partners, and trained the local community in toxic site assessment, health monitoring and basic remediation strategies. Key Highlights:

- We were awarded \$450,000 from the US State Department to address a key pollution issue: mercury pollution from artisanal small-scale gold mining.
- The Colombian federal government is undergoing the Health Pollution Action Planning Process, which will result in a national road map to tackle Colombia's disease-causing pollution.



# Cleanup Projects



Umed. Pure Earth's coordinator in Tajikistan at Jomi cleanup.

#### JOMI. KHATLON PROVINCE. TAJIKISTAN

When homes started being built on a site highly-contaminated with abandoned pesticides in the Khatlon region's Jami district, Pure Earth's coordinator in Tajikistan, Ulugov Umidjon Amonovichis, sprung into action.

He informed the local authorities and presented them with the environmental assessment data he and team members had collected. Understanding the threat posed to the families living in these new homes, the authorities immediately reversed a 2014 approval allowing the land owner to lease this property.

A nearby warehouse full of obsolete, exposed pesticides was demolished and the toxic material was taken to a hazardous waste facility. Then the site was decontaminated.

#### PROJECT LEVERAGE

With the credibility and capacity built from this project, Pure Earth was able to secure a \$750,000 (USD) contract from the European Commission to expand the assessment and cleanup of toxic sites across three regions in Tajikistan by activating 20 community service organizations. This work will continue through 2020.

#### PAMPANGA. THE PHILIPPINES

Lead contamination remaining after years of informal battery recycling in Pampanga village in the Philippines resulted in dangerously high levels of lead in the children living next door. The residential area is now cleaned up, and the team is working with the smelter operator to upgrade to safe methods.



#### FAMILY STORY

Dagay, with her son Dexter visits a small neighborhood in San Simon, Pampanga, Philippines daily to wait for her husband who works at the lead smelter.

Unfortunately, this area has been badly contaminated with lead from former battery recycling. The soil where Dexter and his friends play had lead levels measuring 5,000 to 100,000 parts per million, dangerously high for a child's play area. Pure Earth worked with the local government, the community, and the smelter to build a wall separating the smelter from the residential area. Our team capped the contaminated areas with geotextile fabric then covered it with clean soil. Residents were reusing contaminated materials from the smelter in their homes. This was all removed and the homes were decontaminated. Local health workers were trained to measure and monitor the blood lead levels in the community. Now the homes and play areas are safe for Dexter and his friends.



\* Maps not to scale

In 2017 the Toxic Sites Identification Program (TSIP)

#### **ASSESSED** SITES IN 44 17 COUNTRIES\*



























**POSING A HEALTH THREAT TO 700,000** PEOPLE

**TRAINED** 

INVESTIGATORS IN 6 COUNTRIES

COMPLETED

**CLEANUP PROJECTS IN 2017** 

### Toxic Sites Identification Program (TSIP)

Our Toxic Site Identification Program was active in 17 countries in 2017. In addition to operating in Azerbaijan, Cameroon, Ghana, Indonesia, Kyrgyzstan, Mongolia, Nepal, Senegal, Tajikistan, and Ukraine -we expanded the TSIP program to Colombia, Brazil, Bangladesh, Jamaica, Kenya and Tanzania. We ran new investigator training programs in Bolivia, Brazil, Colombia, the Philippines, Vietnam and India, educating 93 professionals from academic, environmental and government institutions.



These new country teams joined our existing teams across the globe to complete the assessment of 242 sites in 17 countries last year. It is estimated that these sites pose a threat to the health of 700,000 people. It is very common to see children playing everyday in soil with high levels of toxic chemicals. The most common toxicants we found at these sites were lead, followed by arsenic, mercury, pesticides, hexavalent chromium and cadmium.

The TSIP program is the primary way we assist countries in building capacity to address their toxic pollution issues. We collaborate closely with local and national government agencies during this process, and present a detailed report with maps and data from the investigations. This data forms the basis of our recommendations to protect public health at contaminated sites.

The most severely polluted sites, which pose a grave threat to human health, are the ones, depending on funding available, that we select for a detailed assessment and cleanup.



**CLEANUP PROJECTS** 

### In Progress 2017-2018

#### OLLACHEA, PUNO AND LABERINTO, MADRE DE DIOS, PERU

Our project in Peru, supported by the US Department of State, addresses the environmental and health devastation caused by mercury use in artisanal gold mining. We are continuing to train miners in mercury-free methods and have begun a remediation effort using a reforestation technique developed by the CINCIA (Amazon Center of Scientific Innovation) consortium. In December 2017, Pure Earth partnered with CINCIA to ecologically restore the Paolita II Mining Concession of Madre de Dios.



#### PROJECT LEVERAGE

The project represents the first-ever and largest application of CINCIA's mining restoration plan, which uses an extensively researched technique to rehabilitate degraded rainforest and provides a model for other affected regions in the Amazon. These innovative efforts attract private funders like the jewelry company, Brilliant Earth, to invest in miner training and raise awareness around the issue of responsible sourcing.

#### **CLEANUP PROJECTS**

#### **INDIA AND BANGLADESH**

In Patna, India, and Kathgora, Bangladesh, our teams found dozens of toxic hot spots posing a serious health threat to several communities. Informal lead recyclers are common in these communities and operate with no safety controls in urban residential areas. We educated the community about the dangers of lead, especially to children, and explored a range of solutions to stop the lead contamination.

Karmalichak is a densely-populated suburb of 4,000 residents within Bihar's capital city of Patna. In 2016, an informal battery producer closed his shop leaving behind dangerous levels of lead that contaminated surrounding homes, roads and the nearby private elementary school of 250 students. Many of this community's young children were being exposed to lead nearly 24 hours a day.

The Pure Earth team and its partner, the Institute of Environment & Eco Development, conducted community education on the risks of lead exposure through doorto-door visits, culminating in a festival-like event in the center of Karmalichak where the mayor addressed the gathering. Students performed plays to educate peers and family about risk reduction.

Following the assessment of toxic hot spots and community education, the team began the remediation. They excavated the contaminated soil, brought in clean soil, and capped walkways with bricks. Ongoing blood lead monitoring will track the decrease in the lead levels of these children and others in the community.

#### PROJECT LEVERAGE

The successful cleanup in Karmalichak has leveraged more resources from USAID, World Economic Forum's Global Battery Alliance, private funders including ERM, and India's government to implement a multi-faceted initiative consisting of:

- More research on the sources and impact of lead in Bihar State.
- Working with officials at all levels of government, corporate stakeholders, and informal recyclers to develop a cleaner, more profitable battery recycling industry,
- Ultimately cleaning up all lead-contaminated spaces,
- · Community, public and industry education and training, and
- Monitoring children's blood lead levels pre and post-interventions.



#### KATHGORA, BANGLADESH

Starting in November 2017, Pure Earth's project partners University of Dhaka, Bangladesh Department of Environment and International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B) worked together and achieved the following: 1) assessed contaminated outdoor areas; 2) analyzed levels of lead in children's blood; 3) delivered a community education program about lead poisoning risks and measures to protect children 4) completed a soil excavation and capping program to prevent exposures from lead-contaminated soil and dust in outdoor areas; and 5) completed a home cleaning program to remove lead dust from indoor spaces. Through this initial effort, the risk of exposure to hazardous levels of lead was drastically reduced for 300 residents, including 90 children.

#### PROJECT LEVERAGE

With the project's first phase serving as a proof-of-concept for additional pollution work, several visionary funders, including USAID, OFID, Oak Foundation, and UNIDO, are investing in Phase 2, which includes:

- Assessing more toxic hot spots
- Health monitoring of children
- Additional interventions and cleanups
- Health and Pollution Action Planning process for Bangladesh.

#### **DONG MAI & BAC NINH VILLAGES, VIETNAM**



#### PROJECT LEVERAGE

Following a successful cleanup of lead pollution in Dong Mai, and a 70% reduction in villagers' blood lead levels, the government is engaged with Pure Earth to identify other potential cleanup sites. One site being investigated is Bac Ninh. Villagers in Bac Nihn are suffering from severe air pollution from the many smelting and e-scrap recycling operations situated in residential areas.



#### FAMILY STORY

HaThi cares for her granddaughter while the child's mother runs an aluminum smelter - melting aluminum cans in a furnace attached to their home. "The smoke and ammonia make it hard to breathe." HaThi says she knows the air is bad for the baby - her eyes often water in the house. "I hope the city will follow through with its plans to move the smelters to an industrial zone outside of the city soon because it isn't healthy here."

Pure Earth is providing technical support to the government in creating an industrial zone for smelters away from the residential areas. Once this is achieved, the clean up of years of lead and other dangerous waste products can begin.





**CLEANUP PROJECTS** 

#### **MEXICO - BARRO APROBADO**

Together with an Advisory Board and our new partners PSM and HSBC, Pure Earth Mexico is making progress in its fight to end the lead poisoning crisis caused by traditional lead-glazed pottery. The program is expanding in the state of Morelos and advancing into the state of Puebla and Mexico City. 2017 highlights include:

#### **Empowering Potters in the State of Morelos**

- More than 30 new potters are converting to lead-free glaze, and currently there are 53 artisans participating. Activities range from trainings in improving designs and quality and marketing to building new community kilns and health monitoring.
- HSBC launched its "Adopt a Potter Program" where employee volunteers help potters market and sell their cookware.
- After the earthquake, many potters' workshops were destroyed, and HSBC volunteers and Pure Earth helped them rebuild and brought them food and supplies.
- More than 20 restaurants joined Barro Aprobado and are buying lead-free pottery.

On track to have

ARTISANS CREATING LEAD-FREE POTTERY

20 RESTAURANTS BUYING LEAD-FREE POTTERY

#### Pottery Fairs: Building Demand for Lead-free Pottery

• Pure Earth and HSBC collaborated to hold pottery fairs featuring the potters of Tlayacapan and Acteopan at Torre HSBC, HSBC Techno park and Xochitla Ecological Park. The events were well-received, increasing sales of lead-free pottery and raising public awareness about the relationship between glaze and lead.

#### PROJECT LEVERAGE

The National Institute of Health in Mexico will include blood lead level screening for the first time, as part of the national health survey in 2018. The baseline data is critical to understanding the scope of the problem and effectiveness of interventions. This is another example showing how we leverage success from previous projects. Our work converting restaurants and potters to lead-free glaze and testing the blood lead levels of potters in Morales led to a pilot program that screened newborns umbilical cord blood for lead levels. The combination of gathering scientific data and persistent work in the field is yielding major results.

#### KABWE, ZAMBIA

In 2016, we completed our pilot cleanups of 100 homes in the lead contaminated neighborhood of Chowa in Kabwe.



#### PROJECT LEVERAGE

In 2017 Pure Earth continued to advocate for resources to address this environmental health emergency, and the World Bank approved a \$65 million loan to Zambia with specific requirements to address lead pollution and health in Kabwe.

Pure Earth will continue to monitor the project to ensure human health remains at the center of the work.



In addition to the publication of The Lancet Commission on Pollution and Health, Pure Earth research and program team members published five additional papers in peer-reviewed journals. Many other publications are in various stages of development.

The Journal of Health & Pollution

Pure Earth also publishes the Journal of Health & Pollution. The journal emphasizes work relating directly to pollution in low and middle-income countries authored by academics in affected countries.

#### PEER-REVIEWED JOURNALS

A Meta-Analysis Of Blood Lead Levels In India And Attributable Burden Of Disease; Conference Paper: International Conference of the Public Health Foundation of India and the Pacific Basin Consortium, At New Delhi, India; November 2017

"Pérdida de coeficiente intelectual en hijos de alfareros mexicanos" (Intelligence quotient loss in Mexican pottery artisan's children), (pdf) Revistamedica, May, 2017

Pollution and non-communicable disease: time to end the neglect, The Lancet Planetary Health, Volume 2, No. 3, e96–e98, March 2018

Cost Effectiveness of Environmental Lead Risk Mitigation in Low and Middle Income Countries; GeoHealth; 8 February 2018

Improving human health outcomes with a lowcost intervention to reduce exposures from lead acid battery recycling: Dong Mai, Vietnam, Environmental Research; February 2018

### RESOURCES TO BUILD CAPACITY FOR ENVIRONMENTAL HEALTH RESEARCHERS IN LOW AND MIDDLE-INCOME COUNTRIES

#### AuthorAid - A project of the Journal of Health & Pollution

Since 2013, over 100 researchers have taken the free online course, developed by Pure Earth in collaboration with AuthorAID, to help researchers and scientists from low and middle-income countries get published. The course is part of Pure Earth's efforts to expand research and increase data on toxic pollution in low- and middle-income countries, where pollution is the largest killer.

The course, open to researchers in countries designated by WHO as Mortality Strata countries in WHO Mortality Strata B-E, helps participants improve their technical writing and editing skills with the goal of getting their research published in major international journals and findings published in major international journals. Due to increased demand, the course has grown from a five week offering to a 14 week session.

Participants go through online lessons, engage in online discussions with classmates, complete weekly assignments including peer reviews of classmates' work, and receive extensive written feedback on their draft manuscript. Successful participants complete the course with a manuscript nearly ready to submit to an international peer-reviewed scientific journal.

#### **Pollution Infosessions**

In 2017, Pure Earth staff organized a series of educational webinars inviting experts to present on various environmental health and engineering topics. These sessions are recorded and posted on Pure Earth's website for on-demand learning access.



## Leveraging the Momentum in 2018

From The Lancet Report to research and fieldwork, Pure Earth is committed to impacting millions of lives and being a catalyst for systemic change in policy to ensure countrywide pollution remediation. In 2018 we will work in 21 countries to achieve the following:

- 200 to 250 toxic site assessments
- 20 to 30 detailed assessments of sites posing health risks and suitable for a cleanup
- Up to 10 pilot projects cleaning up contaminated sites and changing toxic work practices
- 4 to 6 research papers documenting the feasibility and effectiveness of our interventions
- Publish a white paper on the transboundary nature of pollution.
- Whether it's the mercury in our fish, lead in baby cereal, or dangerous particulates in our air, pollution generated in low- and middle-income countries knows no borders and can and needs to be controlled at the source.

- Partner with Boston College, Harvard School of Public Health and UN Environment on the Global Observatory on Pollution and Health
- Publish an update to The Lancet
   Commission on Pollution and Health
- Expand Health Pollution Action Plans and kickoff projects in 10 countries in 2018
- Activate civil society organizations in 3 countries to work on pollution issues
- Expand the data available on www.pollution.org, making it a more robust tool for country governments to understand and track disease-causing pollution and empower citizens to report what they see in their communities.
- Continue to highlight the connection between NCDs, particularly cardiovascular disease and lung cancer, and pollution.





### Outreach Events



APRIL GALA 2017

Pamela Love, Jewelry Designer (center), and Martin Roscheisen, CEO of Diamond Foundry (right), received the Impact Award and Pure Earth Board Chair Conrad Meyer (left) received the inaugural Green Benefactor Award at the 2017 Benefit Bash, which raised over \$300,000.

Briefing events were held around the globe presenting the findings of The Lancet Commission on Pollution and Health.



DIRTY TALK WITH PURE EARTH AT NYU
"THE WORLD'S #1 TOXIN - LEAD"

Board member Ruben Kraiem explaining our project and policy efforts to stop the use of lead glaze in cooking pottery in Mexico.



**GOLF BENEFIT** 

Enevo received the Green Champion Award, recognizing the company's commitment to environmental sustainability at Pure Earth's 2017 Golf Outing.







### Financial Highlights

#### **Consolidated Statement of Financial Position**

Years Ended December 31, 2017 and 2016

|   | 2017 Consolidated | 2016 Consolidated | Breakdown of Expenses |
|---|-------------------|-------------------|-----------------------|
| CURRENT ASSETS                            |                   |                   |                       |
| Cash and cash equivalents                 | \$ 135,788        | \$ 174,765        | 80%                   |
| Grants receivable                         | 4,186,639         | 6,417,116         | Program               |
| Pledges receivable                        | 285,708           | 453,208           | riogram               |
| Prepaid expenses and other current assets | 267,063           | 530,253           |                       |
| Total current assets                      | \$ 4,875,198      | \$ 7,575,342      |                       |
| Property And Equipment, Net               | 593,851           | 678,371           |                       |
| Security Deposit                          | 25,000            | 25,000            |                       |
| Total assets                              | \$ 5,494,049      | \$ 8,278,713      |                       |
| LIABILITIES AND NET ASSETS                |                   |                   |                       |
| CURRENT LIABILITIES                       |                   |                   |                       |
| Accounts payable                          | 933,555           | 947,909           |                       |
| Accrued expenses                          | 136,299           | 105,379           |                       |
| Line of credit                            | 90,000            | 100,000           |                       |
| Long term debt, current portion           | 166,375           | 157,869           | 00/                   |
| Total current liabilities                 | \$ 1,326,229      | \$ 1,311,157      | 8%                    |
|   |                   |                   | Fundraising           |
| LONG TERM DEBT, net of current portion    | 218,395           | 384,414           | 12%                   |
| Total liabilities                         | \$ 1,544,624      | \$ 1,695,571      | Administration        |
| NET ASSETS                                |                   |                   |                       |
| Unrestricted net assets                   | 445,789           | 327,817           |                       |
| Temporarily restricted net assets         | 3,503,636         | 6,255,325         |                       |
| Total net assets                          | 3,949,425         | 6,583,142         |                       |
| Total liabilities and net assets          | \$ 5,494,049      | \$ 8,278,713      |                       |

#### **Consolidated Statement of Activities**

Years Ended December 31, 2017 and 2016

### Financial Highlights

|  | Year Ended December 31, 2017 |                           |              | Year Ended December 31, 2016 |                           |              |
|--|------------------------------|---------------------------|--------------|------------------------------|---------------------------|--------------|
|  | Unrestricted                 | Temporarily<br>Restricted | Total        | Unrestricted                 | Temporarily<br>Restricted | Total        |
| SUPPORT AND REVENUE                        |                              |                           |              |                              |                           |              |
| Grants                                     | \$ -                         | \$ 1,689,559              | \$ 1,689,559 | \$ -                         | \$ 6,867,525              | \$ 6,867,525 |
| Fundraising income                         | 357,619                      | -                         | 357,619      | 724,769                      | -                         | 724,769      |
| Contributions                              | 322,198                      | -                         | 322,198      | 210,906                      | -                         | 210,906      |
| In-kind contributions                      | 4,494                        | -                         | 4,494        | 82,502                       | -                         | 82,502       |
| Net assets released from restrictions      | 4,441,248                    | (4,441,248)               | _            | 4,036,214                    | (4,036,214)               | -            |
| Total support and revenue                  | 5,125,559                    | (2,751,689)               | 2,373,870    | 5,054,391                    | 2,831,311                 | 7,885,702    |
| FUNCTIONAL EXPENSES                        |                              |                           |              |                              |                           |              |
| Program                                    | 4,161,000                    |                           | 4,161,000    | 4,079,338                    |                           | 4,079,338    |
| Administration                             | 4,161,000                    | _                         | 4,161,000    | 528,045                      | -                         | 528,045      |
| Fundraising                                | 436,819                      | _                         | 436,819      | 416,526                      | _                         | 416,526      |
| Total functional expenses                  | 5,264,016                    |                           | 5,264,016    | 5,023,909                    |                           | 5,023,909    |
|  |                              |                           |              | 3,323,333                    |                           |              |
| Excess (Deficiency) of support and revenue |                              |                           |              |                              |                           |              |
| over functional expenses                   | (138,457)                    | (2,751,689)               | (2,890,146)  | 30,482                       | 2,831,311                 | 2,861,793    |
| Interest expense                           | (36,959)                     | _                         | (36,959)     | (46,016)                     | _                         | (46,016)     |
| Realized (loss) gain on investments        | (334)                        | _                         | (334)        | (931)                        | _                         | (931)        |
| Foreign currency translation adjustment    | 293,722                      | _                         | 293,722      | (19,224)                     | (23,303)                  | (42,527)     |
|  |                              |                           |              |                              |                           |              |
| Change In Net Assets                       | 117,972                      | (2,751,689)               | (2,663,717)  | (35,689)                     | 2,808,008                 | 2,772,319    |
| Net Assets, Beginning                      | 327,817                      | 6,255,325                 | 6,583,142    | 363,506                      | 3,447,317                 | 3,810,823    |
| Net Assets, End                            | \$ 445,789                   | \$ 3,503,636              | \$ 3,949,425 | \$ 327,817                   | \$ 6,255,325              | \$ 6,583,142 |



### Financial Highlights

### Consolidated Statement of Cash Flows Years Ended December 31, 2017 and 2016

|  | 2017           | 2016         |
|--|----------------|--------------|
| CURRENT ASSETS                                       |                |              |
| Change in net assets                                 | \$ (2,633,717) | \$ 2,772,319 |
| Adjustments to reconcile change in net assets to net |                |              |
| cash provided (used in) by operating activities:     |                |              |
| Depreciation   | 97,705         | 96,384       |
| In-kind contribution of investments                  | (50,317)       | (61,973)     |
| Realized loss (gain) on investments                  | 334            | 931          |
| Changes in:  |                |              |
| Grants receivable                                    | 2,230,477      | (2,569,632)  |
| Pledges receivable                                   | 167,500        | (100,120)    |
| Prepaid expenses and other current assets            | 263,190        | (346,683)    |
| Accounts payable                                     | (14,354)       | 305,306      |
| Accrued expense                                      | 30,920         | 10,150       |
| Net cash provided by (used in) operating activities  | 91,738         | 106,682      |
| INVESTING ACTIVITIES                                 |                |              |
| Proceeds from sale of investments                    | 49,983         | 61,042       |
| Fixed asset purchases                                | (13,185)       | (3,428)      |
| Net cash provided by (used in) investing activities  | 36,798         | 57,614       |
| FINANCING ACTIVITIES                                 |                |              |
| Proceeds from line of credit                         | 90,000         | 125,000      |
| Repayments on Line of credit                         | (100,000)      | (75,000)     |
| Repayments of long term debt                         | (157,513)      | (149,078)    |
| Net cash (used in) provided by financing activities  | (167,513)      | (99,078)     |
| NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS | (38,977)       | 65,218       |
| CASH AND CASH EQUIVALENTS, Beginning                 | 174,765        | 109,547      |
| CASH AND CASH EQUIVALENTS, Ending                    | \$ 135,788     | \$ 174,765   |
| SUPPLEMENTAL INFORMATION                             |                |              |
| Interest paid  | \$ 36,959      | \$ 46,016    |

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