

The Environmental Service Group (NY), Inc.

Sustainability Plan & Metrics

2015 - 2016

Sarah Battaglia
4/20/2015

Contents

Company Overview	2
About.....	2
Sustainability Journey	3
Elements of Sustainability Plan.....	3
I. Waste Reduction.....	3
II. Water Conservation	4
III. Energy and Material Optimization	4
IV. Community Investment.....	5
V. Safety	5
Goals & Metrics.....	6
Implementation & Maintenance	6
Stakeholders & Promotion.....	7
Supply Chain.....	7
Employees.....	7
Sustainability Team & Responsibilities	8

APPENDIX A: Sustainability Metrics

Company Overview

About

ESG has been providing comprehensive waste transportation and disposal services since 1986. ESG's headquarters and primary operations are located in Tonawanda, NY. ESG also operates a regional facility in the Pittsburgh, Pennsylvania area. ESG employs 21 full-time personnel and several seasonal or part-time employees at these two locations. ESG has a construction division that does many environmental remediation and construction projects that require the use of heavy equipment. ESG's customer base includes heavy industry, municipalities, schools, government agencies, and private homeowners primarily across Pennsylvania, New York and West Virginia.

ESG also owns two other companies that are located at the Tonawanda headquarters; American Recyclers Co. and Hazman. American Recyclers Co. (ARC) is a permitted transfer and recycling station for non-hazardous and universal wastes. ARC also stabilizes and solidifies containerized non-hazardous waste for landfill disposal at a "Subtitle D" facility. [The term "Subtitle D" means any solid waste landfill disposal that is not permitted for hazardous waste. A "Subtitle D" facility could include Municipal Solid Waste Landfills (MSWLFs), construction/demolition debris landfills, and restricted waste landfills.] ARC has been permitted since 1997. The other division, Hazman, is a Household Collection Facility drop-off center for homeowners and Conditionally Exempt Small Quantity Generators (CESQG). Hazman is open five days a week, and weekends upon request. Hazman currently services approximately 10 residents per day. Since Hazman was fully permitted in 2011, it has recycled a total of 418,700 lbs of household hazardous waste.

ESG's corporate philosophy is that reuse or recycling is paramount in any waste management program, whether through a HHW collection event or in commercial industry. We are all familiar with the Love Canal and Pfohl Brothers landfills where generators were forced to pay for the cleanup of unregulated dumps which were at one time legal disposal sites many years ago in this country. Our belief is that the best liability protection program available is one that utilizes state-of-the-art treatment technologies available, regardless of international boundaries. At ESG we are constantly looking for alternatives for waste handling decisions. ESG enjoys a long-term working relationship with many of the most recognized waste treatment, storage and disposal facilities in the industry. Each facility utilized is carefully selected based on disposal capability, environmental compliance and pricing competitiveness.

- Reduce*
- Reuse*
- Recycle*
- Rethink*
- Repair

**To be discussed in detail in next update. Will discuss how each apply to ESG operations and service*



Sustainability Journey

The Environmental Service Group (ESG)'s initial exposure to sustainability has been from a solution driven material management perspective. For over a decade ESG has been working with customers to provide zero-landfill solutions to customers enacting a zero-landfill policy – many of these policies have been a part of corporate mandated sustainability initiatives. Being in the environmental industry, ESG has decided that it is our duty to “practice what we preach”. ESG believes it’s important to develop and commit to sustainability so we can remain on the forefront of the most ethical and efficient business practices and gain insight on the innovation and challenges that encompass sustainability planning and implementation for both our customers and our stakeholders. ESG is actively pursuing sustainability in the office, in the field and within our facility. By committing to a Sustainability Plan, ESG has an opportunity to highlight past accomplishments and set goals and metrics for continual improvement. In April 2014, ESG signed a pledge with the Western New York Sustainable Business Roundtable (WNYSBR) committing to becoming thriving and resilient business.

Elements of Sustainability Plan

I. Waste Reduction

Due to the type of business, ESG has relationships with recycling facilities throughout the east coast. In addition to utilizing these relationships provide disposal and recycling solutions for customers, these facilities also provide ESG a direct outbound for all material generated from our office, facility and job sites.

ESG has implemented the following waste reduction efforts:

1. Sorting systems for paper, cardboard and plastic
2. Recycling of paper, cardboard and plastic

Proposed Next Steps:

- **Gather Metrics:** Need to determine baseline. Metrics will be taken at point of disposal.
- **Implement Composting:** To minimize the amount of Food Waste from ESG employees. Research cost of composting bin, implementation and transportation to composting facility in addition to any adverse effects (convenience, odor).
- **Purchase Reusable Dishware:** To minimize the amount of Food Waste and Food Packaging generated from ESG employees. Purchase office silverware, cups and dishes
- **Goal:** To be determined upon data collection.



II. Water Conservation

ESG recognizes that fresh water is a valuable resource, one which should be used sparingly.

ESG has implemented the following water conservation efforts:

1. Installation of Dual-Flush Toilets
2. Choosing to Hand-water Gardens

Proposed Next Steps:

- **Gather Metrics:** Track monthly water usage in spreadsheet using water bill.
- **Explore Native Plants:** Meet with local landscaper to determine what types of native plants ESG could use to minimize the amount of water needed in garden.
- **Research Irrigation System:** Consult with local landscaper / other sustainable businesses on irrigation system ideas (ex: Rain Barrel).
- **Goal:** To be determined upon data collection.

III. Energy and Material Optimization

ESG recognizes that energy and materials are valuable resources which should be used sparingly.

ESG has implemented the following energy and material optimization efforts:

1. Installation of energy efficient lighting throughout facility (T-8 Light Bulbs)
2. Installation of an energy efficient furnace
3. Daily printer/computer shut down
4. Purchase of toilet paper made from recycled material
5. Transportation routes scheduled to minimize fuel consumption
6. Material in facility is organized to minimize handling

Proposed Next Steps:

- **Gather Metrics:** Track monthly energy usage in spreadsheet using energy bill. Determine best way to track fuel consumption and miles per gallon.
- **Investigate EPA Smartway:** Determine if there are valuable tools / resources / best practices for transportation companies to track these fuel consumption and efficiency.
- **Goal:** Determine efficient and effective method for tracking fuel consumption. Overall goal to be determined upon data collection.

IV. Community Investment

Over the past 3 years, ESG has been growing a relationship with the Western New York community by providing household hazardous waste recycling solutions and education.

ESG has implemented the following community investment efforts:

1. Operating a convenient Household Hazardous Waste Collection Facility
2. Educating various groups on the importance of safe handling & disposal of household hazardous waste (RealtyUSA Agents, Schools, Municipalities, Boy Scouts of America, Valu Home Centers)
3. Donating full cans of latex paint and aerosols to Habitat for Humanity for reuse

Proposed Next Steps:

- **Gather Metrics:** Track community involvement and donations made in one spreadsheet. (Date, Location, Amount of Material/Topic).
- **Grow Community Partners:** Continue to seek partners looking for education on household hazardous waste.
- **Goal:** To be determined upon data collection.

V. Safety

Due to the nature of ESG's business, safety is a high priority. ESG employees are trained regularly with regard to handling and transporting hazardous materials and non-hazardous industrial waste.

ESG has implemented the following safety training efforts:

1. 40 Hour HAZWOPER – Upon hire
2. 8 Hour HAZWOPER refresher – Annual
3. NYSDOT Hazardous Material Training – Upon hire, as needed
4. OSHA Forklift Training – Upon hire, as needed

Proposed Next Steps:

- **Gather Metrics:** Track the completed training for each employee.
- **Incorporate Workers Comp:** Figure out a way to use Workers Comp to guide safety metrics.
- **Organize Safety Team:** Give ESG employees opportunity to volunteer to participate on Safety Team. Determine expectation and goals for Team.
- **Goal:** To be determined upon data collection.



Goals & Metrics

ESG will spend the next six (6) months gathering data to determine a base measurement. Once a baseline has been determined, incremental goals will be set. (1, 3, 5 year). ESG will utilize innovation and best available technology to achieve these things over time.

Example goals include, but not limited to:

	Baseline	Goals
% GHG Reduction		
Lb. of Material Diverted from Landfill		
Gallons of Water Saved		
Cost Reduction		
Safety (Accidents diverted)		
Miles/Gallon		
Emissions		

Resource(s): <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Implementation & Maintenance

ESG understands that a Sustainability Plan is an ever-changing and evolving document/strategy. Progress will need to be reviewed and implementation methods may need to be adjusted. ESG proposes the following schedule for Sustainability Plan Maintenance:

Month	Task(s)	Responsible Party
January	Workshops, Input Metrics	Coordinator
February	Workshops, Input Metrics	Coordinator
March	Workshops , Strategic Review	Team
April	Workshops , Strategy Approval	Team
May	Workshops, Input Metrics	Coordinator
June	Workshops, Input Metrics	Coordinator
July	Workshops, Input Metrics	Coordinator
August	Workshops, Input Metrics	Coordinator
September	Workshops, Progress Review	Team
October	Workshops, Input Metrics	Coordinator
November	Workshops, Input Metrics	Coordinator
December	Workshops, Input Metrics	Coordinator

WEEKLY

Workshop: Discuss objectives & opportunities

MONTHLY

Input Metrics: Update spreadsheet accordingly using logs, bills, etc.



YEARLY

Strategic Review: Review Sustainability Plan and metrics in its entirety. Review benchmarks/ milestones/goals achieved and where things fell-short. Compile document with new goals for following year.

Strategy Approval: Review the new document / goals for approval and implementation.

Progress Review: Ensure that metrics are being tracked appropriately and goals are reasonable.

Stakeholders & Promotion

ESG will proudly share their Sustainability Plan with stakeholders and partners alike. The plan will be available to view/download on the ESG website (www.esgenv.com) as well as the WNYSBR website (www.wnysustainablebusiness.org).

Supply Chain

ESG procurement will be continuing to improve their sustainability measures by collaborating with suppliers and non-profit organizations.

ESG has implemented the following sustainable supply chain initiatives:

1. Buy Local
2. Bulk Orders
3. Facility Audits

Proposed Next Steps:

- **Goal:** Determine an efficient and effective tracking method for this element.

Employees

ESG management will be responsible to educate and hold accountable ESG employees for sustainability plan implementation.

Proposed Next Steps:

- **Management Education:** Leadership training for teaching and incentive methods
- **Employee Education:** Via workshops led by management
- **Track Individual Employee Progress:** Reduction of Fuel Consumption, Maintenance of Equipment
- **Recognize Success:** Priceless incentives: one-on-one / group recognition, speaking engagement opportunities
- **Goal:** To determine an efficient and effective tracking method for this element.



Sustainability Team & Responsibilities

Position	Name	Responsibilities
Director	John Battaglia	Visionary
Coordinator	Sarah Battaglia	Create plan, oversee implementation & metrics
Transportation Manager	Nick Halliday	Enforcing Transportation initiatives, communicating with team
Facility Manager	Julian Mastropoll	Enforcing Facility initiatives, communicating with team

APPENDIX A: Sustainability Metrics



2015 – 2016 Sustainability Plan
DO NOT COPY WITHOUT PERMISSION

The Environmental Service Group (NY), Inc.
Sustainability Metrics

2016

2016												TOTAL	AVG
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		

WASTE REDUCTION

Material	Location	Volume	Unit	Outbound	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Paper	Office	20	Reems	Recycling														
Cardboard	Office / Facility	1	CYD	Recycling														
Food Waste	Kitchen	20	Lbs.	Landfill														
Food Packaging	Kitchen	20	Lbs.	Landfill														
Plastic Bottles	Kitchen	1	35 gal. drum	Recycling														
Light Bulbs	Facility	Varies		Recycling														
Speedy Dry	Facility	Varies		Waste-to-Energy														
Plastic Pails	Hazman Operations	Varies		?														

WATER CONSERVATION

Method	Location	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Water Usage	Office / Facility	600	Gallons														

ENERGY & MATERIAL OPTIMIZATION

Method / Material	Location / Vehicle	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Energy Usage	Office / Facility	110,000	kWh														
Miles Driven	Truck 1		miles														
Fuel Consumption	Truck 1		gallons														
Fuel Cost	Truck 1		dollars														

COMMUNITY INVESTMENT

Method	Location	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Donation	Habitat for Humanity	2,000	Lbs.														
Education	RealtyUSA	5	Informational Meeting														
Education	Municipality	10	Presentation														
Education	Schools	2	Presentation														
Education	Boy Scouts of America	1	Presentation														
Education	Valu Home Centers	2,500	Brochures														
Household Hazardous Waste Diverted from Landfill	Hazman		Lbs.														

SAFETY

Training	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
40 Hr. HAZWOPER	1	Employees														
8 Hr. HAZWOPER	20	Employees														
NYS DOT Haz Mat	20	Employees														
OSHA Fork Lift	5	Employees														

The Environmental Service Group (NY), Inc.
Sustainability Metrics

2015

2015												TOTAL	AVG
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		

WASTE REDUCTION

Material	Location	Volume	Unit	Outbound	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Paper	Office	20	Reems	Recycling														
Cardboard	Office / Facility	1	CYD	Recycling														
Food Waste	Kitchen	20	Lbs.	Landfill														
Food Packaging	Kitchen	20	Lbs.	Landfill														
Plastic Bottles	Kitchen	1	35 gal. drum	Recycling														
Light Bulbs	Facility	Varies		Recycling														
Speedy Dry	Facility	Varies		Waste-to-Energy														
Plastic Pails	Hazman Operations	Varies		?														

WATER CONSERVATION

Method	Location	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Water Usage	Office / Facility	600	Gallons														

ENERGY & MATERIAL OPTIMIZATION

Method / Material	Location / Vehicle	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Energy Usage	Office / Facility	110,000	kWh														
Miles Driven	Truck 1		miles														
Fuel Consumption	Truck 1		gallons														
Fuel Cost	Truck 1		dollars														

COMMUNITY INVESTMENT

Method	Location	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
Donation	Habitat for Humanity	2,000	Lbs.														
Education	RealtyUSA	5	Informational Meeting														
Education	Municipality	10	Presentation														
Education	Schools	2	Presentation														
Education	Boy Scouts of America	1	Presentation														
Education	Valu Home Centers	2,500	Brochures														
Household Hazardous Waste Diverted from Landfill	Hazman		Lbs.														

SAFETY

Training	Volume	Unit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVG
40 Hr. HAZWOPER	1	Employees														
8 Hr. HAZWOPER	20	Employees														
NYS DOT Haz Mat	20	Employees														
OSHA Fork Lift	5	Employees														