

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
2 OF THE STATE OF OREGON

3) AMENDMENT 1
4 IN THE MATTER OF) MUTUAL AGREEMENT
OWENS-BROCKWAY GLASS) AND FINAL ORDER
5 CONTAINER, INC.,)
6 a Delaware corporation, Respondent.) CASE NO. AQ/V-NWR-2020-208

7 Respondent and DEQ hereby agree that:

8 1. On October 22, 2021, the Department of Environmental Quality (DEQ) and Respondent
9 entered into Mutual Agreement and Final Order (MAO) No. AQ/V-NWR-2020-208.

10 2. Section II, Paragraph 1 of the MAO imposes upon Respondent a total civil penalty of
11 \$661,756 for the violations alleged in the Notice and as amended by the MAO.

12 3. Respondent has paid \$132,352 of the civil penalty to the State of Oregon.

13 4. Section II, Paragraph 2 of the MAO states: “Within 120 days of the MAO Effective Date,
14 submit to DEQ one or more Supplemental Environmental Project (SEP) application(s) that meet
15 DEQ’s SEP approval criteria and contribute no less than \$529,404 to one or more third party
16 organizations to implement one or more SEPs that will provide air quality benefits in the vicinity of
17 the Facility.”

18 5. Respondent submitted a final SEP application to DEQ on February 15, 2022.

19 6. DEQ approved Respondent’s SEP application on February 18, 2022.

20 7. Section I, Paragraph 21 of the MAO states: “Approved SEPs will be incorporated into this
21 MAO by amendment.”

22 8. Respondent and DEQ hereby agree to incorporate the approved SEP into the MAO as
23 Exhibit A (Friends of Trees SEP).

24 9. According to Section II, Paragraph 2 of the MAO, by March 20, 2022, Respondent must
25 transmit payment of no less than \$529,404 to Friends of Trees for implementation of the approved
26 SEP (the SEP Funds). Respondent will provide documentation of the transmittal to DEQ.

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1 10. The balance of the civil penalty, \$529,404, is mitigated to \$0 on the condition that
2 Respondent completes the SEP by September 30, 2025. Respondent will be deemed to have
3 completed the SEP when DEQ receives a report verifying that the Friends of Trees spent the SEP
4 Funds in the manner described in the approved SEP. The report must include:

- 5 a) the information described as “Project Detail,” “Benefits Detail,” and “Cost Detail” described
6 on pages 10 and 11 of the approved SEP;
- 7 b) a description of expenses in each cost category and copies of relevant receipts;
- 8 c) a description of community and partner engagement; and
- 9 d) photographs of tree planting events.

10 The report must be submitted by Respondent with a signed certification that the SEP is complete as
11 described in the report.

12 11. Respondent agrees to refrain from using the value of the SEP as a tax deduction or as part of
13 a tax credit application; and, whenever Respondent publicizes the SEP or the results of the SEP,
14 Respondent will state in a prominent manner that the project was undertaken as settlement of a DEQ
15 enforcement action.

16 12. Respondent must submit to DEQ the report described in Paragraph 10, above by September
17 30, 2025, otherwise the balance of the civil penalty, \$529,404, is due and owing to the State of
18 Oregon on October 1, 2025.

19 13. Respondent agrees to submit Annual Progress Reports to DEQ by June 30, 2023 and June
20 30, 2024. The Annual Progress Reports will document the number and approximate locations of
21 trees planted, the number of plantings that occurred, the number of paid and unpaid participants,
22 voluntarily provided demographic information of the participants, and a financial report showing
23 spending by category and the amount of remaining funds. The Annual Progress Reports must
24 also describe community and partner engagement.

25 14. DEQ agrees that the SEP project may be completed sooner than September 30, 2025 if
26 Friends of Trees completes the plantings in a single tree planting season (October 2022 - April
27 2023). In that event, Respondent must still submit an Annual Progress Report on June 30, 2023.

1 The June 30, 2023 Annual Progress report must include documentation that all of the tree
2 plantings proposed in the approved SEP have been completed. Respondent will not be required
3 to submit an Annual Progress Report in June 2024, but must monitor plantings through the
4 summer of 2024 and submit a final report that includes all of the information described in
5 Paragraph 10, above, by September 30, 2024.

6 15. DEQ may approve at its discretion Respondent's request for additional time to complete
7 any of the requirements specified in Paragraphs 12, 13 or 14.

8
9 OWENS-BROCKWAY GLASS CONTAINER, INC.,
RESPONDENT

10
11 3-1-2022
12 Date

10
11 
12 Signature

13
14 John F. Cayton
14 Name (print)

15
16 Attorney
16 Title (print)

17
18 DEPARTMENT OF ENVIRONMENTAL QUALITY and
19 ENVIRONMENTAL QUALITY COMMISSION

20
21 3/3/2022
22 Date


20
21 
22 Kieran O'Donnell Manager
23 Office of Compliance and Enforcement
24 on behalf of DEQ pursuant to OAR 340-012-0170
25 on behalf of the EQC pursuant to OAR 340-011-0505
26
27

Exhibit A

Friends of Trees SEP



Supplemental Environmental Project Application

Oregon Department of Environmental Quality
Office of Compliance and Enforcement
700 NE Multnomah St., Suite 600
Portland OR 97232

Case Name and No. AQ/V-NWR-2020-208

Project Contact: Yashar Vasef, Executive Director, Friends of Trees,
YasharV@FriendsofTrees.org

Type of Project (choose one):

Pollution Prevention – preventing waste or pollution at the source, by conserving energy or natural resources, or by making process changes (such as chemical substitutions) or by making a process more efficient so that less waste is created for a given amount of product.

Pollution Reduction – reducing the amount and/or danger presented by some form of pollution, often by providing better treatment and disposal of the pollutant.

Public Health Protection- an example is the medical examination of residents in a community to determine if anyone has experienced any health problems because of the violations at issue.

Environmental Restoration and Protection –improving the condition of the land, air or water in the area damaged by the violation. For example, restoring a wetland or planting trees along a riparian zone to reduce erosion and provide shade for improved water quality.

Emergency Planning and Preparedness – providing assistance to a responsible state or local emergency response or planning entity. Such assistance may include the purchase of computers and/or software, communication systems, chemical emission detection and inactivation equipment, HAZMAT equipment or training.

Assessments and Audits to determine if the Respondent is causing any other pollution problems or can run its operation better to avoid future violations.

Environmental Compliance Promotion- providing training or technical support to other members of the regulated community to achieve, or go beyond, compliance with applicable environmental requirements.

Other Projects that have environmental merit but do not fit within the categories listed above.

Who is conducting the project? (i.e. Respondent or third party entity such as a watershed council or other nonprofit organization)

Friends of Trees: 3117 NE Martin Luther King Jr. Blvd Portland, OR 97212, 501c3 Tax Identification: 93-0999999.

Location where project will take place: Please see attached.

Project description (Please attach an extra sheet of paper, if necessary):

_____ Please see attached. _____

What environmental benefits are expected? Please see attached.

How will you measure/assess the benefits? Please see attached.

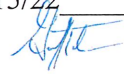
What is the total projected cost of the project? Explain. (Qualifying costs are all reasonable costs of executing the SEP and may include costs of preparing the SEP proposal, costs of materials and services, wages paid to employees (appropriate to the work), and wages and proportional overhead for employees of a third party executing the project. Qualifying costs do not include entertainment or refreshment costs related to the SEP.)

Attached.

What is the timeframe for the project (most projects are completed within one year)?
Include milestones and final completion date.

Attached.

Date : 2/15/22

Signature  Geoff Tichenor, Stoel Rives, for Owens-Brockway Glass Container, Inc.



Friends of Trees SEP Application for Case No. AQ/V-NWR-2020-208
January, 2022

Case Name and No: In the Matter of Owens-Brockway Glass Container, Inc., Mutual Agreement and Final Order Case No. AQ/V-NWR-2020-208

Project Contact: Yashar Vasef, Executive Director, Friends of Trees, YasharV@FriendsofTrees.org, 3117 NE Martin Luther King Jr. Blvd Portland, OR 97212

Type of Project (choose one):

Friends of Trees is pleased to submit this “**Environmental Restoration and Protection**” type project for DEQ’s consideration.

Who is conducting the project?

Third party non-profit organization: Friends of Trees: 3117 NE Martin Luther King Jr. Blvd Portland, OR 97212, 501c3 Tax Identification: 93-0999999.

Since 1989, Friends of Trees has planted over 900,000 trees in the Portland, Salem, and Eugene Metro areas. Friends of Trees hosts weekly plantings in and around these areas, and has extensive experience working with neighborhood groups, community members, and municipal governments to plant trees on public and private property.

Location where project will take place:

Friends of Trees has developed this project to provide air quality and community benefits in the vicinity of the Owens-Brockway Glass Container, Inc. facility at 9710 NE Glass Plant Rd in Portland. To meet that objective, the proposed project, as further described below, will involve extensive tree planting efforts. These efforts will be focused in the Sumner neighborhood, where the facility is located, as well in the adjacent neighborhoods of Cully, Parkrose, Argay and Wilkes, and within the nearby Columbia Slough Watershed in NE Portland. No trees will be planted directly on the Owens-Brockway property using this SEP funding. *See attached map.*

The neighborhoods this project was designed to benefit have traditionally been underserved and negatively affected by the federal government’s historical practice of redlining. *See*



Historical Context of Racist Planning, Portland Bureau of Planning and Stability, Figure 4: Homeowners' Loan Corporation Redlining. These neighborhoods also include heat islands and have some of the highest rates of asthma in the city. Regional Equity Atlas, <http://www.equityatlas.org/atlas-maps/asthma-rates> (last accessed Jan. 7, 2022); J. Voelkel and V. Shandas, *Towards Systematic Prediction of Urban Heat Islands: Grounding Measurements, Assessing Modeling Techniques*, p 10 https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1183&context=usp_fac (last accessed Jan. 7, 2022).

Project activities will occur on both private and public rights of way with all appropriate permitting and landowner approval.

Project description:

“Trees filter out air pollution, suck up storm water, store carbon, nurture wildlife and even improve people’s mental and physical health.”

*- Einhorn, “What Technology Could Reduce Heat Deaths? Trees.”
The New York Times (July 3, 2021)*

Friends of Trees, in partnership with residents, community members, and partner organizations, will coordinate the planting of 5,000+ trees and native plants over the course of the project. Of these, about 800 trees will be located along neighborhood streets and private properties and about 4,200 more trees and native plants will be planted in natural areas in the vicinity of the Owens-Brockway facility. Friends of Trees expects that these trees will grow to improve air quality and the quality of life for residents of the NE Portland neighborhoods of Sumner, Cully Parkrose, Argay, and Wilkes.

Outreach for neighborhood plantings will focus on high traffic corridors, Safe Routes to Schools, and neighborhood Greenways. Existing tree canopy and urban heat island mapping will also be utilized for outreach, targeted planting, and community conversations.

Leaves from the trees planted in this project will not only intercept and store particulate matter from the air, they will provide shade and cooling benefits, lessen urban heat island effects, and improve habitat and stormwater management.

Friends of Trees will engage these neighborhoods’ strong, vibrant, and diverse communities throughout all stages of the project and, most importantly, during public tree planting events. Friends of Trees will team with nonprofit community partner organizations to help facilitate



community conversations, voice amplification, and storytelling for nearby residents.

Friends of Trees will listen to and work with community members to identify planting locations, decide what to plant (e.g., select trees that are both appropriate for the space and desired by the community), and plant and care for the trees together. The community will be involved in checking on trees once planted, learning about trees planted, and building future planting plans. Based on our experience with other projects, Friends of Trees anticipates the proposed project will create opportunities to attract other donors to grow the overall project size and scope.

Each interaction over the course of the project will be an opportunity to talk with the community about the positive impacts of clean air, clean water, and healthy urban tree canopy in neighborhoods and nearby industrialized areas.

Outreach will include door to door conversations, community meetings, tabling at events and farmer's markets, mailings, social media and more. Outreach will be assisted by nonprofit community partners situated in and representing community members in the project area.

The tree planting events will be designed to provide educational opportunities as well as to deepen community connections. When people plant trees side-by-side, a lasting connection is created. Working towards a common goal shows our youth and next generation a path forward that includes creative solutions to the complex environmental issues we face today.

The tree planting events will be managed by Friends of Trees staff members who are skilled in arboriculture, community outreach, event planning, and project management. During each event, trained crew leaders will demonstrate proper and safe tree planting techniques and will guide community members in planting trees for about half the day (typically from 9am-1pm). Then, planted trees will be mulched, staked with twine, and tagged with a flier sharing information about each tree and how to get more involved.

Friends of Trees has been working in Northeast Portland for over 25 years and will bring that experience to further elevate the project. Friends of Trees has enjoyed great success with its tree plantings. Trees planted with Friends of Trees in neighborhoods have an average survival rate 95% after the first year of establishment. Trees planted in natural areas have an average survival rate of 80% over that same time frame.



Community partner organizations will support multi-lingual outreach and community conversations to reflect the diverse array of spoken language in this community. New ideas will be incorporated as information is gathered from community members on meaningful engagement.

Neighborhood Tree Plantings: The exact planting sites selected in this project will be determined through community outreach, door to door conversations, and strategic partnerships with nearby schools, community-based organizations (such as Verde, Native American Youth Association, Asian Pacific American Network of Oregon, Hacienda CDC, among others). Friends of Trees has worked with all of these organizations and is excited to continue collaboration as new planting locations are developed. A diverse array of high-quality trees will be purchased from Oregon nurseries. Tree selection will be coordinated with neighborhood residents to ensure the right tree is planted in the right place.



All neighborhood trees will be visited twice during the first growing season to support residents in proper tree care and watering during the integral years of establishment. Friends of Trees will also provide tree care resources and guidance via postcards, phone calls, and follow up visits.

Trees planted along streets and private properties take far more resources to coordinate as the streetscape is complex. Green Space events are planned in coordination with long-time partners, require less communication and planning, and have space for a larger number of plants in one location. For this reason, we have come to a breakdown of Neighborhood vs. Green Space projects in an effort to best meet the needs of the community and provide access to participation for those residents who do not own land or ability to approve planting at their home (rentals).

Green Space Tree Plantings: Subject to securing access approvals, trees will also be planted with community members at nearby green spaces including (but not limited to):

Wilkes Creek Headwaters and Wilkes Creek Park:
15401 NE Fremont St, Portland, OR 97230

Columbia Slough Natural Area: 11058 NE Simpson St, Portland, OR 97220

Rocky Butte Natural Area: 3102 NE Rocky Butte Rd, Portland, OR 97220

Cully Park, 5612 NE 72nd Ave, Portland, OR 97218

The above list includes some of the most significant greenspaces in the neighborhoods in the vicinity of the Owens-Brockway facility. Wilkes Creek is the only stream in Portland that is free flowing to the Columbia Slough, an ecologically critical area that requires restoration. Rocky Butte is a community gem, a 612-foot extinct volcano that attracts visitors from all over the city. And Cully Park, the park nearest the facility, was built on top of a landfill with efforts from the local community.





Green Space projects are monitored every summer post planting. Staff visit sites in April to conduct tree care activities at newly planted sites - mulching and weeding. Staff also visit sites in summer for maintenance, clearing of invasives, and daylighting any new plants at the site. Monitoring is conducted in September each year at the natural area sites to fully capture the growing season. Survival at natural area sites for Friends of Trees is on average 80%. For this reason, we plant in some areas more densely knowing the survival trend at each site.

What environmental benefits are expected?

Carbon Sequestration- Trees take up atmospheric carbon dioxide (CO₂). They sequester (lock-up) CO₂ in their roots, trunks, stems and leaves while they grow. Trees near buildings can reduce heating and air conditioning demands, thereby reducing emissions associated with power production. Collectively, forests offset approximately 16% of the U.S. annual emissions. Pennsylvania State College of Agricultural Sciences, *How Forests Store Carbon*, 2020. <https://extension.psu.edu/how-forests-store-carbon>. Carbon dioxide reductions are calculated by applying experience from previous projects and using a peer-reviewed calculator developed by the U.S. Forest Service. <https://www.itreetools.org/about>. In one year, [usda.gov](https://www.usda.gov) calculates that a mature tree will absorb 48 pounds of carbon dioxide. **At maturity, the trees planted over the course of the proposed project will absorb over 200,000 pounds of carbon dioxide each year.** Trees planted in strategic locations to provide shade to buildings and structures will additionally reduce energy use for cooling needs.

Improved air quality- Leaves from trees intercept and hold small particles on their surfaces—like dust, ash, pollen, and smoke—and absorb gaseous air pollution. Ground-level ozone formation is reduced because air temperatures in tree-filled areas are cooler. One study estimated that trees in London remove 850-2,000 tons of particulate matter per year. Mathew Tallis, *How Trees Clean the Air in London*, University of South Hampton (2011). Another study by a U.S. Forest Service economist at the Pacific Northwest Research Station in Portland, Oregon estimated that





the loss of a massive number of trees to the emerald ash borer, across 15 states, resulted in 21,000 more deaths from cardiovascular and respiratory diseases. Geoffrey Donovan, *Exploring Connections Between Trees and Human Health*, Science Findings 158 (2014). This study documents the connection between a tree and improved air quality and human health outcomes.

Increased shade- The efficacy of using trees to cool neighborhoods and filter particulate matter is well supported in scientific literature. A recent report by the U.S. EPA indicates that trees help cool urban heat island surface temperatures by 20-45°F and peak summer temperatures by 2-9°F. Using Trees and Vegetation to Reduce Heat Islands, www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands.

Particularly when planted to cover impervious surfaces and streambeds, new trees will measurably cool neighborhoods and waterways, improve habitat and reduce heat island effect. A 2019 study of nature-based designs to mitigate urban heat in Portland found that adding trees would help maintain or reduce temperatures in the city's neighborhoods. See *Nature-Based Designs to Mitigate Urban Heat: The Efficacy of Green Infrastructure Treatments in Portland, Oregon*, Atmosphere (May 21, 2019), <https://www.mdpi.com/2073-4433/10/5/282/htm>. Shade over buildings will also provide reduced energy use.

Habitat creation - From their leafy branches to their tangled roots, trees provide a habitat for a host of plants and animals. Specifically, salmon require cool, clean water to spawn and survive. Trees help shade and cool our waterways and filter storm water. Trees planted along riparian areas also reduce erosion, thus keeping water clean and clear of sediment.



Stormwater management - Trees and healthy urban green spaces reduce stormwater runoff by capturing and storing rainfall in the canopy and releasing water into the atmosphere through evapotranspiration. A single tree with a 30 foot crown is capable of capturing more than 700 gallons of rainwater in a year. In addition, tree roots and leaf litter slow runoff flow and create soil conditions that promote the infiltration of rainwater into the soil. See City of Portland, Stormwater Solutions Handbook, <https://www.portlandoregon.gov/bes/article/129057>.



How will you measure/assess the benefits?

Friends of Trees records and keeps information on all trees planted and tree survival following the first growing season. Tangible environmental benefits are assessed by analyzing this data with the [i-tree planting calculator](#) or similar tool. For this project, we will estimate tree benefits for greenhouse gas (GHG) sequestered and avoided (owing to reductions in energy use), energy conserved, air pollutants captured and avoided, stormwater filtered, and total tree biomass.

We will also record and track all community members engaged, hours of participation, demographics, and post-event survey data.

What is the total projected cost of the project?

Friends of Trees' project budget is set out below. Friends of Trees will track all expenses for the project and will ensure that no funds are spent on entertainment or refreshment.

Project Budget

- Friends of Trees' Preparation of the SEP proposal: \$2,000
- Community partner engagement: \$53,000. Budget item for use to support nonprofit community partner organizations to lead community engagement activities such as community conversations, workshops, language specific plantings, and more.
- Trees, mulch, stakes, and other planting materials: \$110,000
- Concrete removal for planting locations: \$10,000
- Site prep and establishment of select planting locations: \$30,000
- 2022-2023 planting event outreach and coordination: \$157,500. This includes Friends of Trees staff resources (i.e. Program





Managers & Program Specialists) to implement the SEP, e.g., resident and community member outreach and confirmation of planting locations, species selection, nursery and tree ordering communications, volunteer recruitment and coordination, and all event day logistics planning.

Program Managers x approx. 850 hrs x \$30/hr = \$25,500

Program Specialists x approx. 5,080 hrs x \$25/hr = \$132,000

- 2023-2024 planting event outreach and coordination: \$157,500. Same as above.

Note: Planting season in Oregon begins in October and ends in April.

- Reporting and analysis: \$9,404

Total Budget: \$529,404*

*The above budget is subject to change as the project unfolds; as possible, excess monies identified for a particular budget item above will be reallocated to increase the amount of trees planted over the project life.

What is the timeframe for the project?

Due to the nature of this project, and limitations posed by optimal planting season conditions in Portland, Oregon, the project will occur between July 2022 and July 2024, along the following projected milestones: *important note added to end of timeline

2022 Estimated Milestones:

July 2022 - Community conversations, outreach (through partners, mailing, door to door, and tabling at community gatherings) toward confirming planting locations for November, 2022 - April, 2023.

September 2022 - Finalize planting calendar, confirm tree species for specific sites, order trees from nurseries, and host Crew Leader Training. Site visits will be conducted for natural area locations and any site preparation will be scheduled.

October 2022 - April, 2023 - Friends of Trees will host 6 public tree planting events within the specified geographic area. 400 street and private property trees will be planted and 2,100 in specified natural area sites.



2023 Estimated Milestones:

June 2023 - Friends of Trees will visit all newly planted trees to record survival and provide resident resources on watering and young tree care. Friends of Trees will provide an *Annual Progress Report* to DEQ by June 30th. The annual report will document the number and approximate locations of trees planted, the number of plantings that occurred, the number of paid and unpaid participants, voluntarily provided demographic information of the participants, and a financial report showing spending by category and the amount of remaining funds.

July 2023 - Community conversations, outreach (through partners, mailing, door to door, and tabling at community gatherings) toward confirming planting locations for November, 2023 - April, 2024.

September 2023 - Finalize planting calendar, confirm tree species for specific sites, order trees from nurseries, and host Crew Leader Training. Site visits will be conducted for natural area locations and any site preparation will be scheduled

October 2023 - April 2024 - Friends of Trees will host 6 public tree planting events within the specified geographic area. 400 street and private property trees will be planted and 2,100 at specified natural area sites.

2024 Estimated Milestones:

June 2024 - Friends of Trees will visit all newly planted trees to record survival and provide resources on watering and young tree care. Friends of Trees will provide its second *Annual Progress Report* to DEQ by June 30th. The annual report will document the number and approximate locations of trees planted, the number of plantings that occurred, the number of paid and unpaid participants, voluntarily provided demographic information of the participants, and a financial report showing spending by category and the amount of remaining funds.

2025 Estimated Milestones:

June 2025 - Friends of Trees will visit all newly planted trees to record survival and provide resources on watering and young tree care.

September 2025 - Friends of Trees will submit the *Final SEP Report* to DEQ by projected date of September 30, 2025. This report will include the following documentation:

1. **Project Detail:** Location/addresses/map of plantings, planting date, and species of all



plantings, and number of community members at each planting event.

2. Benefits Detail: Estimated tree benefits calculated by [i-tree planting online calculator](#) or similar tool

- Greenhouse Gas (GHG) sequestered and avoided (owing to reductions in energy use)
- Energy conserved
- Air pollutants captured and avoided
- Stormwater filtered
- Tree total biomass

3. Cost Detail: Total project cost and cost by category, including tracked staff time

NOTE: It is possible for planting project completion by July 31st, 2023 - reducing the timeline by 1 year. This is dependent on capacity of the team and would mean the timeline is adjusted to planting in only one planting season Oct, 2022 - April, 2023. All reporting would then be completed by July 31st, 2024 to capture monitoring data. Friends of Trees will update DEQ and Owens-Brockway on timing as it is finalized.

Friends of Trees is pleased to have the opportunity to propose and implement this project.



Attachment A: Project Neighborhoods in Vicinity of Owens-Brockway Glass Container, Inc.

