



GEO Certified®

GEO Certified® Report

TPC San Antonio

Prepared by independent verifier Taylon Earl

Certified by GEO Foundation: 2025
Recertification due: 2028



"I was pleased to have the opportunity to visit TPC San Antonio. The course demonstrates a strong commitment to sustainability, particularly in its protection of the Edwards Aquifer. Operational practices, environmental monitoring, and on-site projects clearly reflect the sensitivity of the location and go well beyond baseline compliance. In addition, the Valero Texas Open hosted at the course generates significant charitable contributions to both local and national organizations. I'm excited to see how future enhancements will build upon the strong sustainability efforts already underway."

Taylon Earl
(GEO accredited independent verifier)



Introduction

GEO Foundation is pleased to confirm that TPC San Antonio has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

TPC San Antonio has:

1. Met the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points (CIP) set for the future and Critical CIP's (CCIPs) to be reviewed at recertification, TPC San Antonio should be awarded GEO Certified® status.

For the certification period stated above, TPC San Antonio can therefore claim a position as a leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the independent verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course, maintenance facility and clubhouse. These dedication and leadership qualities are an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation

Carole Kerrey
Director, Certification and Credibility,
GEO Certification Ltd.



Verification and Certification

Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at www.sustainable.golf

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at www.isealliance.org



Verifier's Report

The Sustainability Agenda for golf covers the following themes and action areas:

THEMES	ACTION AREAS
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• Partnerships & Outreach • Golfing & Employment • Advocacy & Communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE			
N1 Habitats and Biodiversity			
Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	N1.1.1 Sound understanding of the nature and landscape value of the site	General knowledge of the wildlife and habitats on the site	Highlight: The course is built directly over the Edwards Aquifer, a highly sensitive drinking water source serving over 7 million people. Management demonstrated a strong understanding of regulatory constraints, aquifer protection requirements, and surrounding natural features, including adjacent nature preserve areas.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Identify rare, protected or endangered species found on the golf course; Understand legal responsibilities for landscape protection and special area designations, if applicable	Operations account for legally protected species, including salamander habitat associated with the Edwards Aquifer. Chemical use, construction practices, and anchoring systems are designed to avoid penetration of the clay cap and protect groundwater and habitat integrity.
	N1.1.3 Sound understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site, if applicable	No known archaeological, historical, or cultural designations were identified on site during the verification. No specific cultural heritage management plan was reviewed.
N1.2 Opportunities to naturalise the golf course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Monitor patterns of play to identify underutilised areas of turfgrass	Significant turf reduction and naturalisation efforts are underway, including non-irrigated native plantings and reduced managed acreage.
N1.3 Actively create and manage habitats for wildlife	N1.3.1 Projects to create and manage habitats in the best way for wildlife and golf	Prioritise native species of varying size and structure when planting Prioritise native trees and shrubs when planting Prioritise native aquatic species of varying size and structure when planting Establish mowing buffer zones next to water bodies and wetlands	Extensive non-play areas are naturalised and planted with native, non-irrigated vegetation, providing habitat while reducing water and maintenance inputs. Buffer zones and reduced managed turf areas were observed across the site.

N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species	Follow local best practice to protect or attract endangered, protected or rare species found on site	Aquifer protection measures, chemical restrictions, and zero off-site discharge practices support protection of sensitive aquatic species dependent on groundwater quality. Operations account for legally protected species, including salamander habitat associated with the Edwards Aquifer.
N2 Turfgrass			
N2.1 Maintain optimum turfgrass and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	Select appropriate grass species for the climate	Turf management prioritises plant health through mechanical practices, walk-behind mowing on greens, and reduced turf stress. The courses feature Bermuda grass across its courses, with specific strains used for different playing surfaces to optimize for Texas heat.
	N2.1.2 Practices to maintain good soil structure and condition	No specific international requirement, however, identify course management and agronomic activities and look for continual improvements	Turf management prioritises plant health through mechanical practices, walk-behind mowing on greens, and reduced turf stress.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Test and monitor soil pH; Follow legal requirements when timing fertiliser applications Ensure staff are fully qualified to use fertilisers Ensure staff use appropriate protective equipment Regularly calibrate and test applicators	Chemical use is strictly limited, approved by area (greens, fairways, etc.), and supported by extensive application records. GPS-controlled sprayers ensure precise application, minimizing overuse and environmental risk.
N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Change hole locations frequently	All equipment at the course is maintained to extremely high standards.
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	Identify and track pest and disease hotspots, including sensitive areas Scout the course daily for early signs and symptoms	Chemical use is strictly limited, approved by area (greens, fairways, etc.), and supported by extensive application records. GPS-controlled sprayers ensure precise application, minimizing overuse and environmental risk. Chemical applications are highly restricted, approved only for specific turf areas, and guided by daily scouting and need-based decisions. GPS-controlled sprayers further limit application rates and reduce

		Accurately diagnose to determine the cause of weeds, pests and diseases	environmental risk. Chemical selection and use are governed by a master-approved pesticide list with defined health advisory and groundwater trigger thresholds. Products are approved centrally and reviewed over time, with discontinued products clearly identified and removed from use.
	N2.3.2 Application of chemicals with full safety precautions	Use legally registered and approved products; Prefer products for the specific weed, pest or disease; Follow legal requirements; Ensure staff are fully qualified to use pesticides; Ensure staff use appropriate protective equipment; Regularly calibrate and test applicators; Dilute and dispose of leftover product on untreated areas of amenity turfgrass	All applicators are certified, PPE requirements are task-specific, and equipment is calibrated and GPS-controlled to prevent overapplication.
N3 Pollution Prevention			
N3.1 Prevent pollution across the entire site	N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations	Document procedures for emergency spill responses ; Retain no-spray/no-spread buffer areas next to water bodies and wetlands; Retain no-spray/no-spread buffer zones in and around ecologically sensitive areas	No water leaves the property; all water is captured and reused on site. Surface water testing is conducted twice annually, and the San Antonio Water System (SAWS) conducts quarterly well sampling around the property. Surface water monitoring is conducted as part of the facility's aquifer protection program. Independent laboratory analysis showed no concentrations of herbicides, fungicides, and pesticides in surface water samples collected the courses. The facility operates under externally imposed chemical restrictions specific to the Edwards Aquifer recharge zone. Trigger-based limits for groundwater and surface water provide an added layer of protection beyond standard regulatory requirements.
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Formal wastewater discharge agreement, if applicable	The course is in partnership with the Marriott San Antonio Hill Country Resort. All clubhouse and resort operations are managed by the hotel.

	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	Wash machinery over an impermeable, leak-free surface; Mix and load pesticides and fertilisers over an impermeable, leak-free surface; Triple rinse pesticide containers and applicators	Wash bays and maintenance buildings are equipped with below-grade holding tanks for containment. Chemical mixing, washing, and storage areas are fully contained and compliant with aquifer protection requirements. Chemical handling and washdown activities are supported by containment infrastructure, including holding tanks beneath wash bays and buildings. No off-site discharge occurs; all captured water is retained and reused on property.
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	List of hazardous substances, made available to authorised staff; Product and material data safety sheets; Well ventilated concrete or metal building; Impermeable, leak-free flooring; Sufficient storage capacity; Spill containment kits; Secondary containment e.g., bunds or drip trays; Emergency wash area, as per local requirements (body shower and / or eye wash station); Hazardous substances safely collected by a registered company or body ; Follow any additional legal requirements	Chemical storage is covered, double-contained, and supported by detailed inventory and application records. Permits, certifications, and inspection records were available at the front desk. Chemical storage areas are covered and double-contained, and product use is tightly restricted due to Edwards Aquifer regulations. Extensive application records and approved chemical lists by play area were available for review. Chemical inventories align with an approved PGA/TPC master list that defines allowable active ingredients, classes, and environmental thresholds. This framework supports compliance with SAWS oversight and aquifer protection regulations
	N3.2.2 Legal compliance in the storage and handling of fuels and gases	Tank secured to a horizontal, flat, non-combustible surface; Secondary containment of fuel in the event of spills e.g. bunds and drip trays; Inspection of storage tank(s) at least quarterly, if required; Fire extinguisher in the immediate area	Fuel and chemical containment systems are designed to prevent subsurface penetration, consistent with the clay cap protection requirements of the Edwards Aquifer recharge zone.

N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate wastewater usage, treatment and discharge	Impermeable, leak-free surface; Treatment as per local requirements (oil, grease and / or clipping separation; Formal discharge agreement, if applicable	Water that falls on the courses is captured, and no water leaves the property; all water is captured and reused on-site. Stormwater that falls off-site is directed away from the courses to stormwater capture areas or natural drainage.
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RESOURCES			
R1 Water			
Objectives	Requirements	Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	Select appropriate grass species for the climate e.g., drought and disease tolerance; Target irrigation to essential playing surfaces; Prioritise native, drought tolerant species for landscaping and planting	The facility totals approximately 400 acres, with only 150 acres irrigated. Highlight: In 2024, irrigated acreage in the practice facility was reduced from 25 acres to 7 acres, significantly lowering water demand.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	Schedule irrigation based on informed assessment of soil moisture and weather forecasts; Evaluate new irrigation technologies e.g., central control, precision sprinklers etc.; Provide staff training on efficient irrigation practices; Adjust sprinklers to playing surfaces only	Highlight: Winter painting of tees, greens, and fairways on the Canyon Course reduces irrigation needs during dormant periods.

	R1.2.2 Practical measures to use water more efficiently in buildings	Monitor and record water consumption (bills, flow meter etc.); Encourage water conservation practices amongst players and staff	Water efficiency efforts within buildings were discussed at a high level, but detailed monitoring data or water audits were not reviewed because of the course's partnership with the Marriott San Antonio Hill Country Resort. All clubhouse and resort operations are managed by the hotel.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	Water abstraction permit, if required; Report water consumption to environment agency, if required	The course uses well water to irrigate but does reuse captured water to fill irrigation reservoirs when available.
R2 Energy			
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in golf course maintenance	Naturalise non-playing areas to reduce mowing and other energy intensive inputs	Highlight: Greens mowers are hybrid, and robotic mowers and ball pickers are used on the practice facility to reduce fuel use and labor inputs. A future opportunity to transition drainage sump pumps to solar power was discussed.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Monitor and record energy consumption (bills, meters etc.)	Energy efficiency measures in buildings were discussed generally; however, formal energy audits or detailed consumption tracking wasn't available because of the course's partnership with the Marriott San Antonio Hill Country Resort. All clubhouse and resort operations are managed by the hotel.
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	Understand the energy mix of your electricity supplier; Explore possible greener energy providers	Renewable energy use on site is currently limited. Solar-powered drainage sump pumps were discussed as a potential future improvement. CIP: Evaluating and piloting renewable energy opportunities is planned for the future, and expanded efforts in this area would further strengthen sustainability initiatives.
R3 Materials			
R3.1 Reduce materials demand	R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives	No specific international requirement, however, identify activities to reduce the demand for materials and look for continual improvements	Highlight: Permeable paving made from recycled tires is used extensively on the Canyon Course, improving infiltration and reducing runoff. Concrete from past projects has been ground and stored on site for reuse as base material, and tires are recycled when available.
R3.2 Purchase responsibly	R3.2.1 Commit to sustainable purchasing practices	Favour responsible, lower impact products	Sustainable purchasing practices were discussed informally, but a written sustainable procurement policy wasn't available because of the course's

			partnership with the Marriott San Antonio Hill Country Resort. All clubhouse and resort operations are managed by the hotel.
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	Put in place a recycling separation system, according to local rules and availability; Clear, simple and visible bin signage; Monitor and record weight of waste for each stream e.g. invoices, bills etc.	Labelled recycling bins and containers are extremely visible around the maintenance area.
R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	Authorised waste collector for general, hazardous, industrial and green waste, if required	The course shows a strong knowledge and compliance to all waste management regulations.

COMMUNITY			
C1 Health & Wellbeing			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Improve health and wellbeing	C1.1.1 Benefits to human physical and mental health from golf and facility activities	Plans in place to respond to incidents and emergencies	All standard safety protocols were in place for chemical sprayers and equipment handling. PPE was provided to all employees, and its use was strictly enforced.
C1.2 Be open and inclusive	C1.2.1 Inclusivity and diversity in membership and visitor policies	Membership policies free from discrimination across age, gender, sexual orientation, religion, and ethnic background	Not observed. The course's partnership with the Marriott San Antonio Hill Country Resort leaves all clubhouse and resort operations under the hotel's management, including membership and visitor play.

C1.3 Employ fairly, safely and provide career opportunities	C1.3.1 Ethical and legal employment, working conditions and professional development	Adopt an equal opportunity recruitment and hiring policy; Follow all relevant legislation and best practice for hiring and employment; Follow all relevant legislation and best practice for worker safety	All standard safety protocols were in place for chemical sprayers and equipment handling. PPE was provided to all employees, and its use was strictly enforced. The course followed equal opportunity hiring policies and all regulations involving employment and hiring.
<u>C2 Outreach & Inclusion</u>			
C2.1 Diversify access and provide multifunctionality	C2.1.1 Social and recreational activities at the facility	No specific international requirement, however, identify multifunctional activities and look for continual improvements	The facility hosts numerous youth and junior tournaments and serves as a practice facility for UTSA. While not a formal First Tee site, access to play is available, and a First Green class with a local elementary school is scheduled. The resort offers a variety of activities outside of golf, but is managed through a partnership with the Marriott San Antonio.
C2.2 Provide for volunteering and charity	C2.2.1 Opportunities available for volunteering and support of charities and good causes	No specific international requirement, however, identify activities to support volunteering and charity and look for continual improvements	The Valero Texas Open is a significant charitable event, generating substantial community benefit and engagement.
C2.3 Establish active community partnerships	C2.3.1 Positive and constructive engagement with neighbours, the local community and other groups	No specific international requirement, however, identify partnerships and community activities and look for continual improvements	Partnerships exist with UTSA and select youth initiatives. Broader partnerships with schools, conservation groups, or community organizations were limited. CIP: Besides the partnerships with the local university and some involvement in youth play, the course could do a much better job of engaging the local community. We discussed the relationship strain that the implied water use causes with the local communities.
<u>C3 Communications & Advocacy</u>			
C3.1 Engage staff and golfers	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Involve staff and committees in sustainability efforts; Involve golfers in sustainability efforts;	The facility communicates sustainability efforts to members and occasionally through social media. CIP: An opportunity exists to further publicize aquifer protection and environmental initiatives more broadly.

		Post sustainability information in the clubhouse and / or on the golf course	
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	Share at least 3 Highlights on sustainable.golf	Some sustainability messaging occurs through member communications and social media, but it is intermittent. CIP: Proactively sharing aquifer protection, water quality monitoring results, and chemical safeguards with the broader public would significantly strengthen advocacy performance.
C3.3 Follow a journey of continuous improvement	C3.3.1 Measures to help track, review and improve sustainability and climate action	Put measures in place to ensure that OnCourse can be updated annually	Highlight: The existence of a long-term, evolving pesticide approval list (2010–2023) demonstrates ongoing review and adaptation of chemical practices based on updated science and risk thresholds. This provides a strong foundation for future transparency and communication of aquifer protection efforts. Projects like permeable cart paths and the continued work with pollinators around the course are great measures to continue to improve the sustainability of the course.

Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value – strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf