

GEO Certified® Independent Verification Report



Golf Facility: Cañuelas Golf Club
Prepared by: Delfina Achinelly
Date: February 2019

Executive Summary

Certification audit was performed on February 8th, 2019. It lasted 6 hours and included: opening meeting, golf course walking, visit to the clubhouse facilities and to the maintenance warehouse.

The "management team" was the responsible to prepare all the details to reach the certification instance. This team, which was present during the on-site visit, is composed by:

Ariadna Clemente: Manager

Melisa Alurralde: Head of Administration

Rodrigo López Martínez: Head of Club House

Julio Isnardi: Head of General Maintenance

Alejandro Young: Superintendent

Facundo Franco: Quality Manager

The CGC has certified ISO 9001: 2015 and ISO 14001: 2015. Both certifications have already been renewed, and the main goal is to keep on making improvements in order to maintain these international standards in the long term.

CGC is located on Route 205 Km 66,800 in Cañuelas town, Buenos Aires province. Cañuelas is one hour far from the Autonomous City of Buenos Aires (Federal Capital).

The CGC is close to Cañuelas main town, which has approximately 30,000 inhabitants.

The CGC belongs to the entrepreneurial group of "Molino Cañuelas" belonging to the Navilli family, being Mr. Aldo Navilli the founder of the company. A particular feature of CGC is that it does not have a board of directors, instead it is managed by a team of professionals with specific tasks and whom carry out the work following rigorous quality procedures (names and roles above).

GEO Certified®

Independent Verification Report

The CGC is a type of entrepreneurship that in Argentina is called "country club", which means that in addition to owning a golf course, it has a neighborhood for housing.



Within the property there is also a private neighborhood planned with 367 lots between 1000m² and 2500m². At the moment there are only 10 houses built.

The CGC has 31 employees: 16 for the management of the golf course, 11 for green areas, 2 mechanics and 2 operators of large machines. Plus the management team.

The CGC is inserted into the region called Pampa Depressed or Depressed land from Salado. Its name comes from the flat characteristic of its surface and the lower level it presents compared to the rest of the Pampa's components. It is a uniform landscape of grass steppe, with abundant areas of natural pastures.

These characteristics determine one of the most important features of the region: rivers of little marked channel, prone to large floods, and the presence of water mirrors.

The soil is characterized by a powerful layer of clay that hinders drainage and favours waterlogging conditions, which is why the golf course has a broad and efficient drainage system.

Within Cañuelas region the main water courses are Cañuelas, Castro and Cebey (this one crosses the golf course) and lagoons located in large spaces without drainage.

The phreatic surface is 80 cm depth and in some places at 1.30 meters depth.

The characteristic climate of the region is humid or temperate type with no dry season. It has an average temperature of 24.7 C° in January and 9.1 C° in July, with an annual average of 16.5 C°. Rain falls are abundant, especially in summer.

Characteristics of construction of the golf course:

- 18-hole par 72 course "parkland"
- Optional golf carts to play
- Road for cars: 9000 meters along the 18 holes
- Total area: 62 hectares.
- Greens average surface: 650 m² each, with greens that reach 800 m².
- Built under USGA standards
- Turfgrass greens: Agrostis Palustris (Bentgrass) Variety L 93.
- Pasture of the tees: Tifway (Hybrid variety of Bermuda)
- Grass of the fairways: Tifway (hybrid variety of Bermuda)
- Fairways: average width 35 yards
- Tees of exit: 4 tees per hole (black, blue, white and red).
- Lagoons: there are 6 that come into play in 10 of the 18 holes
- Toro irrigation system
- Drainage system

GEO Certified® is administered by GEO Certification Limited. For more info: www.sustainable.golf



GEO Certified®

Independent Verification Report



- Bunkers and cross bunkers: there are 43 bunkers surrounding the greens and 45 cross bunkers distributed in different fairways
- Roughs: very broad, planted with common Bermuda
- Total length championship tee: 7,267 yards
- Driving range and Putting green

Designed by the prestigious architect James Donaldson, the club house is visually integrated into the golf course and into the overall landscape of the club. It has an area of 2,000 m² and offers services not only for players but also for companions: bar, restaurant, locker rooms for men and women, pro shop, gym, playing cards room, living room, playgrounds for kids and special events rooms.

Nature

The CGC golf course was built on a former farm. Before the construction, an environmental impact assessment was held to get the approval from the environmental local authority. The core of the design of the golf course was to conserve part of the native flora to promote and enriched the pre-existing wildlife. The CGC has an environmental policy according to ISO 14001 requirements. Every new employee must attend to an induction workshop to be informed about the ongoing environmental initiatives and programmes.

To build the golf course, many cubic meters of soil were removed. The spaces where soil was removed, later became artificial lagoons. To guarantee the integration of the lagoons with the native fauna and flora, they were not intervened in any way: bed is natural (without waterproofing), current vegetation was formed with the passage of time, no agrochemicals are used in any way, the level of water varies according to rainfalls and the height of the phreatic surface.

Although the CGC is aware of the presence of a variety of animals, it is highly recommended for CGC to create a specified record for birds, mammals, reptiles, fishes and other species that inhabit the golf course. The record could be created together with universities or NGO's related with these topics. This record should be updated every year or less.

To revalue the golf course as an ecosystem, there must exist more communication about what the CGC does to protect their wildlife and flora. Therefore, it is recommended to implement communication actions like infographics, boards, posters, articles on internet, etc.

There is an important balance between the maintained turf and the out of play areas. The last ones, are native vegetation and because there is no human interference, there is plenty of native wildlife. Approximately there are: 12ha of native grassland, 4ha of native woodland and 20ha of maintained turfgrass.

GEO Certified®

Independent Verification Report

Turfgrass was selected according to climate and in order to reduce the use of artificial irrigation. For greens CGC use Agrostis Palustris (Bentgrass) L93 variety, for tees and fairways Tifway (hybrid variety of Bermuda).



Greens were built under USGA requirements.

Fungicides are used only for prevention reasons, mostly on greens surfaces.

There is a calendar to plan the chemical applications. Before every chemical application a communication is sent to the CEO and to the CGC employees, in order to be aware.

For 2020, the goal is to build up an Agrostis nursery garden inside the CGC.

There are buffer zones into the golf course but away from fairways, greens or play zones. Also, there are buffer zones around the woods.

There is a chemical application plan and every application is recorded on a specific register to explain what they have applied and why. There is also an environmental aspects and impacts matrix where chemicals are reviewed before using.

Chemical application is only carried out if weather is favourable and is made by trained and certified employees. The CGC has high technology machines to guarantee the best and the safer chemical application possible.

It is compulsory, and also part of the CGC human resources policy, to train employees on health and safety regarding chemicals application, handling and also in case of spill over. CGC records these training sessions on a specific register that every attendant must sign.

If an accident takes place, there is a specific register to record all the information: date, time, victims, damage, cause, location, chemicals involved, immediate action, correction action and preventive action.

There is a blackboard where days without accidents are indicated (over a total of 365 days). In case of an accident the count goes back to 0. It is useful in order to motivate employees and to have an indicator of the health and safety performance.

At the maintenance warehouse there is a concrete platform for washing machinery after being used. Waste water (from machinery washing and from clubhouse facilities) goes to a water processing facility, to filter and adjust physicochemical characteristics to discharge water in order with the requirements of local legislation.

GEO Certified®

Independent Verification Report

Cooking oil is separated and picked up by a transport. This transport delivers oil to a recycling project that converts oil in fuel. The CGC gets a receipt of the amount of oil recycled every time.



Water quality testing is made at least once a year. Frequency depends on the water authority requirements. Results are recorded on a specific register. Quality testing is held by an authorized laboratory.

For placing hazardous materials, there is a specific outdoor place nearby the maintenance warehouse. Hazardous materials are split in categories: agrochemicals, empty agrochemicals containers, paint containers, machines used, oil, gasoil (under special conditions), car's batteries. Each sector is separated by a woven wire fence and has a containment tray. Moreover, the place has a roof and is locked with a padlock. A special request and permission are needed to have access to supplies like agrochemicals. All the facilities are in accordance with the local legislation. The CGC does not need to be part of the "district hazardous materials generators register" because the generation does not belong from the main activity: golf course. It belongs from a secondary activity: "maintenance" of the golf course.

For green waste the CGC has purchased a wood chipper to reduce the volume and generate a supply for greenkeeping. They obtain "wood chips" that are applied all over the golf course and the plant beds in the surroundings of the clubhouse, main entrance, playgrounds, putting green, etc.

Resources

The CGC is located above of the Puelche and Pampeano groundwater reservoir. None of those are suitable for human consumption but are enabled for artificial irrigation. For using groundwater sources, CGC is processing a special permission from the water district authority. This permission has to be revalidated.

Groundwater is used both for outdoors (artificial irrigation) and indoor facilities (kitchen, bathrooms, showers, maintenance warehouse).

For human consumption, the CGC use rechargeable water bins of 20 lts provided weekly from a local supplier. They have a specific place to store the bottled water, out of reach of sun and other climate events.

Cañuelas has an average of 900mm of rainfall per year. This condition allows the CGC to apply artificial irrigation less than others golf courses.

There's an artificial lagoon that is refilled naturally by the Puelche groundwater reservoir. There is a flow meter to monitor how much water gets in and how much is consumed for artificial irrigation purpose. This lagoon is also refilled with rain water.

GEO Certified®

Independent Verification Report

To monitor water quality CGC coordinates biochemical analysis with the laboratory LABCA (scientific and environmental laboratory). The quantity of analysis depends on the type of water:



- Lagoons: 12 times per year (6 lagoons biannual frequency)
- Creek: 4 times per year (upstream and downstream biannual frequency)
- Consumption: 6 times per year (FQ annually and biannual bacteriologic in two water wells)
- Liquid effluent: 12 per year (monthly frequency)

All over the golf course there is a drainage system that redirects the excess rain water directly to the Cebey creek.

The CGC has registers of water consumption since the beginnings of the golf course.

To reduce water consumption into the CGC facilities it is recommended the installation of water reducers. This type of devices does not modify water pressure but the water volume consumed. With this kind of technology, it is possible to reduce more than 50% of the consumption. It could be used in all kind of taps without damage to them.

Also, it is recommended to increase the environmental awareness to employees and mostly to visitors who maybe don't know all the efforts that are held to protect resources.

So far, there are no renewable energy sources at the CGC facilities, however they will consider this option in the mid-term.

Since the beginning, CGC has registers of energy consumption, year after year. The seasons with major electricity consumption are spring and summer. This increase coincides with the tournaments season, where more people attend to the CGC (players, visitors, staff, suppliers, etc).

CGC has implemented many actions to reduce energy consumption. At the clubhouse and offices, heating and cooling are sectorized. In facilities like bathrooms and changing rooms, there are movement sensors to turn on lights for some minutes. This reduce waste of energy considerably.

Most of the light bulbs are efficient LED technology. CGC has the goal to replace all the remaining light bulbs for LEDs.

CGC has a purchasing policy that is evaluated every year. Priority is for local suppliers except for those ones that are irreplaceable. The KPI's using to evaluate

GEO Certified®

Independent Verification Report

suppliers are the followings: product/service quality, delivery service, response, cost, health and safety awareness, environmental awareness.



Other current policies from CGC: Integrated Management System (IMS: Quality and Environment), Corporate Social Responsibility, Human Resources.

In the near future CGC plans to incorporate health and safety into the management system. Therefore, the IMS policy will also integrate those themes

At CGC there is a waste management system. In all the facilities the in-site separation categories are: paper, cardboard, plastic, organic, trash.

At the maintenance warehouse there is a deposit for recyclable materials. It was built up for that purpose and under the local legislation requirements. It has a rooftop to avoid rain and the possibility of damage of materials like cardboard or paper. Once the deposit is full, CGC hires a company to transport the recyclable materials to the recycling centre in Ezeiza, a town located 40 km far from Cañuelas. Unfortunately for now, there is no other place closer than that. Once the recyclable materials arrive to the recycling centre, CGC gets a receipt with the total amount (in kilograms) of the materials they have sent. This is an important KPI for evaluating the waste management system performance.

With organic waste coming from the kitchen, CGC makes compost and then uses it around the club house and the golf course.

Young golfers from CGC golf school, do a volunteering day to pick up the cigarette butts all over the golf course. This action not only eliminates pollution but creates awareness among future golfers.

It is recommended to incorporate waste separation at the golf course. There are waste bins but they are not able to separate recyclable from non-recyclable. In the future, it is recommended to incorporate materials like glass or aluminium to the waste management system.

To enhance the waste management system the CGC should implement more communication actions, not only for employees but also for visitors. Although the efforts and action plans are effective, it needs more visibility and diffusion of the goals achieved through the years.

Community

GEO Certified®

Independent Verification Report

At CGC there is a management team that organizes and coordinates all the actions that involve issues related with environment, quality, social responsibility and health and safety.



Members and visitors are provided with information when they enter to the CGC. To new employees there is a specific induction about all the initiatives (quality, environment, health and safety, corporate responsibility).

In the last year, CGC has organized 3 charitable events related to human health and education.

Because CGC was built up from scratch, all the facilities are adapted to persons with reduced mobility.

So far there is no diversification of land use and it's exclusively to members, both golfers and homeowners.

Golf courses are ecosystems that provide biodiversity. I recommend to CGC to offer a recreational activity to the community, like bird watching or plants recognition. It could be an activity of once or twice a year frequency that will increase social impact in a positive way.

Conclusion

I, Delfina Achinelly, independent accredited verifier, recommend Cañuelas Golf Club to be awarded the GEO Certified® ecolabel because they have shown a strong management system, not only in environmental issues but in quality and health and safety as well.

To improve the groundwater using, CGC is planning to work together with a worldwide recognized expert in irrigation and turfgrass management.

In the midterm CGC is looking forward to connect their waste water facilities to the Cañuelas city one.

Data recording is updated and reliable. This allows the management team to use performance KPI's and set goals monthly, quarterly and annually.

CGC has shown proactivity and continual improvement objectives. The golf course and facilities management exceed the requirements to be granted with the GEO certification.

GEO Certified® Independent Verification Report

