

# GEO Certified® Independent Verification Report



Golf Facility: Jumeirah Golf Estates  
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## NATURE

Objective	Requirement	International Mandatory Practice	Key Evidence	Verifier Notes
<b><u>N1 Habitats &amp; Biodiversity</u></b>				
<b>N1.1 Understand the site and surroundings</b>	<b>N1.1.1 Sound understanding of the nature and landscape value of the site</b>	<b>(Course management)</b> Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	<b>Confirm</b> map(s), aerial visual reproductions, drawings etc and / or images; <b>Confirm</b> survey documents; <b>Observe</b> habitats and vegetation types	There is a 'green team' committee at Dubai Golf, which looks after the preservation of the nature & landscape. Compared to EGC and DCGYC there is less emphasis regarding the value and naturalisation potential of the site. Only the desert-like mounds of the golf course and the use of native sand for the bunkers provide value to the landscape currently. The fire grasses are an autochthonous species which maintains the nature value of the site.

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	<b>N1.1.2 Knowledge of legal designations for protected areas, habitats and species</b>	<b>(Course management)</b> Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	<b>Confirm</b> documentation, if available, and / or images; <b>Observe</b> site(s); <b>Discuss</b> with facility representative(s) what the designation is, who the authority is, restricted or informed management practices, other responsibilities or legal requirements etc	There is less biodiversity emphasis compared to EGC and DCGYC, however, this can easily be improved by working together (JGE is the newest addition to Dubai Golf management). Fire grasses, the Arab Fox and the cormorant were identified as native & protected species. Only course lakes and spaces below wooden paths were considered potential habitats. The course is surrounded by villas so there may be less potential than the other sites.
	<b>N1.1.3 Understanding and respect for cultural heritage</b>	<b>(Course management)</b> Protect any archaeological, historical or cultural designations on the site	<b>Observe</b> site(s) and / or feature(s); <b>Confirm</b> documentation, if available, and / or image(s); <b>Discuss</b> as above	
<b>N1.2 Opportunities to naturalise the course</b>	<b>N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass</b>	<b>(Course / club management)</b> Observe, track and / or monitor golfer play	<b>Discuss</b> how this is undertaken, i.e. GPS player tracking, visual / anecdotal, surveying players etc	Since the design stage, turf reduction was considered. All non-playable areas are desert & native grass areas. The Fire course is never overseeded. The Earth course is overseeded only in roughs for villa's aesthetic purposes.

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				The club is looking for opportunities to change current desert sand for woodchips in order to decrease maintenance (weed removal on sand, etc.)
<b>N1.3 Actively manage habitats for wildlife</b>	<b>N1.3.1 Projects to manage habitats in the best way for wildlife and golf</b>	<b>(Course management)</b> Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	<b>Confirm</b> document(s) and / or action plan(s); <b>Observe</b> habitat project(s) and / or view images; <b>Discuss</b> management plans if no formal written documentation	Ghaf tree planting initiative (autochthonous species). A good number of that protected tree has been planted in the last months following a government campaign. Buggy traffic is avoided in native areas & habitats thanks to GPS control.
<b>N1.4 Conserve key species</b>	<b>N1.4.1 Practical conservation measures for priority species</b>		<i>No specific international requirements, however, <b>discuss</b> management conservation activities, as appropriate</i>	Existence of green corridors between bunkers and below wooden cart paths for the Arabian Fox. Cormorant have found their protected habitat on the course lakes where they can also fish.
<b><u>N2 Turfgrass</u></b>				
<b>N2.1 Maintain optimum turf and soil health</b>	<b>N2.1.1 Appropriate turfgrass varieties adapted to climatic</b>	<b>(Course management)</b> Select appropriate grass species for climate	<b>Discuss</b> how cool season or warm season varieties are informed by climate zone;	Bermudagrass 419 on fairways and roughs, Tif Eagle in greens and tees.

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	<b>and other geomorphological factors</b>		<p><b>Observe</b> projects to transition grass species i.e. trial plots, practice areas etc;</p> <p><i>Note: 'Transitional' climates to explain justification and extent of cool season species present</i></p>	<p>Warm season grasses: drought &amp; poor water quality tolerant species. Improved 419 bermudagrass is being brought from the Emirates Golf Club to JGE roughs.</p>
	<b>N2.1.2 Practices to maintain good soil structure and condition</b>		<p><i>No specific international requirements, however, <b>discuss</b> course management and agronomic activities, as appropriate</i></p>	<p>Use of soil amendments (gypsum, sulfur) to improve soil conditions. Trials with porous ceramic &amp; zeolite are taking place now in order to improve soil moisture retention.</p>
	<b>N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation</b>	<b>(Course management)</b> Soil tests and nutrient analysis	<p><b>Confirm</b> test / report document(s); <b>Discuss</b> the informed basis and approach to fertilisation</p>	<p>Leaf tissue analysis 3 times per year in order to determine if fertilization program is correct and in order to adjust fertilization applications.</p>
<b>N2.2 Prioritise cultural management</b>	<b>N2.2.1 Non-chemical pest, disease and weed management</b>	<b>(Course management)</b> Sharpen mowing blades; Remove surface moisture; Hand weeding	<p><b>Discuss</b> the informed cultural / mechanical (non-chemical) basis and approach to turf management</p>	<p>Hand weed removal on different course areas is a priority above chemical treatments. Battle against detrimental nematodes is biological (applications of seaweed, local compost).</p>

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<p><b>N2.3 Use chemicals responsibly</b></p>	<p><b>N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues</b></p>	<p><b>(Course management)</b>          Establish patterns and levels of risk for pests and diseases;          Scout the course daily for early signs of pests and disease;          Accurate pest and disease identification;          Map and track pest and disease hotspots;          Establish pest and disease thresholds</p>	<p><b>Confirm</b> management policy / plan document(s);  <b>Confirm</b> map(s) and / or images;  <b>Discuss</b> the informed assessment of chemical applications to turf i.e. preventative / curative / combination approach</p>	<p>Pesticide use is planned out carefully and as preventive as possible.          Spot treatments are targeted instead of wall to wall applications.          When a disease can not be identified, samples are sent to The Turf Disease Center for diagnosis instead of broad-spectrum applications.</p>
	<p><b>N2.3.2 Application of chemicals with full safety precautions</b></p>	<p><b>(Course management)</b>          Use only legally registered and approved products;          Ensure staff are fully qualified and licenced to use pesticides;          Regularly calibrate and test applicators;          Use appropriate protective equipment;</p>	<p><b>Confirm</b> chemical / product log;  <b>Confirm</b> applicator licences;  <b>Observe</b> spraying and protective equipment;  <b>Observe</b> turf areas for disposal of leftovers;  <b>Discuss</b> as above</p>	<p>In UAE, no licence is currently needed. Dealers are supposed to fulfill the requirements.          Yearly audit is carried out in order to guarantee both legal compliance &amp; expiry date.          Trakhees – free zone authority.</p>

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Dilute and dispose of leftover product on untreated areas of turf

## 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**

**(Course management)**  
Document procedures for emergency spill responses; Maintain mowing buffer zones around water and all ecologically sensitive areas; Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas; Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas

**Confirm** emergency spill response plan;  
**Confirm** map(s) and/or images;  
**Observe** buffer zones and no-spray areas

1m buffer perimeter surrounding lakes is left during treatments.  
There are plans for spill responses.

#### **N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations**

**(Club management)**  
Ensure all hazardous materials are safely and securely stored;

**Confirm** licences and / or contracts for disposal of hazardous waste;

Chemicals are stored in a specific tank and retired by Dubai Municipality from the property.

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		Ensure compliance with all required standards and systems for hazardous waste and waste water discharge	<b>Confirm</b> waste water discharge licence	
	<b>N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations</b>	<b>(Course management)</b> Ensure wash areas are on impermeable, leak-free surfaces; Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators	<b>Confirm</b> licences and / or contracts for disposal of hazardous waste; <b>Confirm</b> waste water discharge licence; <b>Observe</b> hazardous materials storage and infrastructure; <b>Observe</b> washing and preparation areas	Chemicals are stored in a specific tank and retired by Dubai Municipality from the property. Contaminated water from the washing pad is recycled and re-used.
<b>N3.2 Safely manage hazardous substances</b>	<b>N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances</b>	<b>(Course management)</b> Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building; Sufficient storage capacity; Impermeable flooring; Spill	<b>Confirm</b> chemical / product log, as above; <b>Confirm</b> local authority inspection report for storage tanks, if applicable; <b>Observe</b> hazardous materials storage and infrastructure (as above); <b>Observe</b> emergency response and safety devices;	Dubai Golf supports the compliance of all legal regulations.

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		<p>containment kits present; Emergency wash area; Fire extinguisher in the immediate area; Secondary containment for fuel, either externally constructed, or integrally manufactured; Regular inspection of storage tanks</p>	<p><b>Observe</b> washing areas (as above); <b>Observe</b> fuel storage tanks and surroundings</p>	
<p><b>N3.3 Responsibly manage waste / storm water</b></p>	<p><b>N3.3.1 Appropriate waste water usage and discharge licences</b></p>	<p><b>(Course management)</b> Waste water discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)</p>	<p><b>Confirm</b> waste water discharge licence / sewerage agreement; <b>Observe</b> wash bay with impermeable surface; <b>Discuss</b> on-site treatment of waste water, as applicable</p>	<p>Waste water is recycled by Dubai Municipality. The club has the appropriate licences and water is recycled for re-use.</p>

## RESOURCES

Objective	Requirement	International Mandatory Practice	Key Evidence	Verifier Notes
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R1 Water



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<p><b>R1.1 Minimise water demand</b></p>	<p><b>R1.1.1 Measures to reduce the need to consume water</b></p>	<p><b>(Course management)</b> Target irrigation to essential playing surfaces only</p>	<p><b>Discuss</b> irrigation policies, practices and considerations</p>	<p>High precision of control: double sprinklers between playing areas and naturalized roughs in order to irrigate separately. Sprinklers have been paired in stations looking for water savings i.e. sprinklers irrigating bunkers slopes are grouped together. Communication wires are connected together at the satellite base in order to irrigate simultaneously zones with similar water requirements. Hard line irrigation between playing areas and naturalized areas. In the future, fire grass areas are to become desert areas in order to avoid completely irrigation.</p>
<p><b>R1.2 Maximise water efficiency</b></p>	<p><b>R1.2.1 Practical measures to use water more efficiently on the golf course</b></p>	<p><b>(Course management)</b> Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas; Ensure irrigation schedules are informed by weather</p>	<p><b>Confirm</b> TDR soil moisture sensor; <b>Confirm</b> irrigation software; <b>Discuss</b> irrigation hardware and maintenance</p>	<p>15% of water reduction has been achieved thanks to ET (evapotranspiration) based irrigation scheduling. Soil moisture is measured for high efficiency irrigation. 4500 sprinklers allow precision of control for irrigating only small areas.</p>

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		patterns and soil moisture analysis		Approx. 200 electrovalves for drip landscape irrigation. Arc regulated sprinklers avoid irrigating the desert areas.
	<b>R1.2.2 Practical measures to use water more efficiently in buildings</b>	<b>(Club management)</b> Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	<b>Confirm</b> water auditing procedures; <b>Confirm</b> internal record keeping, utility bills and invoices, data management	Showers nozzles are being replaced for more efficient ones. Water taps and WC washings are started and stopped automatically.
<b>R1.3 Source water responsibly</b>	<b>R1.3.1 Measures towards alternative, lower quality sources of water</b>	<b>(Course / club management)</b> Ensure appropriate water abstraction permit and reporting, as required	<b>Confirm</b> water abstraction permit and reports to regulating authority, if applicable	100% irrigation water is greywater and local treated sewage effluent water. 45-50% is water from the villas that is recycled and re-used for course and landscape irrigation. The rest comes from Dubai municipality.
<b><u>R2 Energy</u></b>				
<b>R2.1 Reduce energy demand</b>	<b>R2.1.1 Measures to reduce the amount of energy</b>	<b>(Course management)</b> Minimise areas of managed	<b>Observe</b> areas removed from intensive maintenance;	Irrigation software is to be upgraded to Toro Lynx in order to irrigate per second

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	consumed in course maintenance	turf to reduce mowing, irrigation, and turf inputs	<b>Discuss</b> areas identified for ongoing naturalisation	instead of minutes. That will lead to shorter water window and energy efficiency.
<b>R2.2 Maximise energy efficiency</b>	<b>R2.2.1 Measures to use energy and fuels more efficiently in buildings</b>	<b>(Club management)</b> Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	<b>Confirm</b> energy auditing procedures; <b>Confirm</b> internal record keeping, utility bills and invoices, data management	
<b>R2.3 Source energy responsibly</b>	<b>R2.3.1 Measures to source alternative, renewable forms of energy</b>	<b>(Club management)</b> Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	<b>Discuss</b> research into renewable energy provision / generation	No fuel propelled buggies - 170 electrical chargers for buggies on-site. Lithium batteries are being evaluated now under high temperatures in order to reduce energy consumption.
<b><u>R3 Materials</u></b>				
<b>R3.1 Reduce materials demand</b>	<b>R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives</b>	<b>(Club management)</b> Undertake a review of materials consumed	<b>Confirm</b> waste auditing procedures; <b>Discuss</b> materials and products that have been identified, reduced or eliminated	Use of native red desert sand on the Fire course. On the Earth course, white & brown sand used in order to gain contrast.

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<p><b>R3.2 Purchase responsibly</b></p>	<p><b>R3.2.1 Practical use of an ethical / environmental purchasing policy</b></p>	<p><b>(Club management)</b> Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials</p>	<p><b>Confirm</b> policy document / statement; <b>Observe</b> specific items used or consumed</p>	<p>Purchasing policy established for Dubai Golf for the 3 facilities (JGE, DCGYC, EGC) following both all ethical &amp; environmental requirements in UAE.</p>
<p><b>R3.3 Reuse and recycle</b></p>	<p><b>R3.3.1 Waste stream separation for maximum recycling and re-use opportunity</b></p>	<p><b>(Club management)</b> Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled</p>	<p><b>Confirm</b> waste auditing procedures (as above), utility bills and invoices, data management; <b>Observe</b> bins around the facility and main waste area</p>	<p>Use of flask, metallic bottles for water instead of plastic bottles. Each player / visitor can recycle the flask refilling it with water instead of opening a new plastic bottle. Around 200,000 plastic bottles per year can be saved. Course furniture such as potable water towers are being manufactured by local supplier. 60% cheaper than standard golf distributor. Separation of: green waste / scrap / oils / cardboards / batteries. Water is recycled from the washing pad. Green waste is taken by Dubai Municipality Green Waste Department.</p>

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<b>R3.4 Demonstrate legal compliance</b>	<b>R3.4.1 Compliance with all local and regional waste management regulations</b>	<b>(Club management)</b> Use authorised waste and recycling contractor for general, hazardous, industrial and green waste;	<b>Confirm</b> invoices, trade waste licences, if available	Dubai Golf supports the compliance of all legal regulations. In the 2 cantinas, the F&B service and waste management service are both externalized
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## COMMUNITY

Objective	Requirement	International Mandatory Practice	Key Evidence	Verifier Notes
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### C1 Outreach

<b>C1.1 Diversify access and provide multi-functionality</b>	<b>C1.1.1 Social and recreational activities at the facility</b>		<i>No specific international requirement, however, <b>discuss</b> activities as appropriate and look for continual improvements</i>	The state of the art JGE Golf Academy is a feature that attracts players worldwide. One of the top academies in the world. Parents are encouraged to come and play golf and learn at the academy with their children. The aim is to bring the family to the club, all together. After school classes are offered for children, so that parents can play golf meanwhile their children are learning / playing.
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				The resident's Country House is also open for golf members, offering swimming pool, gym, children's spaces with supervision, etc.
<b>C1.2 Provide for volunteering and charity</b>	<b>C1.2.1 Opportunities available for volunteering and support of charities and good causes</b>		<i>No specific international requirement, however, <b>discuss</b> activities as appropriate and look for continual improvements</i>	
<b>C1.3 Establish active community partnerships</b>	<b>C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups</b>	<b>(Club management)</b> Create a 'sustainability working group'	<b>Confirm</b> meeting minutes and agendas, if available; <b>Discuss</b> composition and roles of group, frequency of meetings etc	Direct (walking) access from the closer residences to the clubhouse through 3 different points. No car drive needed. Neighbours can walk around the course in the early morning / late evening: free promenade. Improving family life with activities such as pool movies (open cinema). "Bring families together and let them be together".
<b><u>C2 Golfers &amp; Employees</u></b>				
<b>C2.1 Improve health and wellbeing</b>	<b>C2.1.1 Benefits to human physical and mental health</b>		<i>No specific international requirement, however, <b>discuss</b> as appropriate</i>	JGE is just 10 minutes away from Dubai's crowded area, but it's surrounded by a quiet, peaceful and relaxed atmosphere.

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	from golf and facility activities			Ballroom, member's area, open gym, yoga classes, tennis courts etc. Prayer room for workers on site.
<b>C2.2 Be open and inclusive</b>	<b>C2.2.1 Inclusivity and diversity in membership and visitor policies</b>	<b>(Club management)</b> Demonstrate inclusive policies for members and visitors	<b>Confirm</b> policy statement / document, if available; <b>Discuss</b> if no formal documentation	JGE is the official and main course for Emirates Golf Federation players. National players have special discount on green fees. Happy birthday card is sent to every member. Employees know the main contact points with the golfers through their visit to the course, and they try to make golfer & visitor experience outstanding.
<b>C2.3 Employ fairly and safely, and provide career opportunities</b>	<b>C2.3.1 Ethical and legal employment, working conditions and professional development</b>	<b>(Club management)</b> Follow all relevant national legislation and best practice for employment, health & safety etc	<b>Confirm</b> employee induction procedures, health & safety, risk assessment reports, if available; <b>Discuss</b> if no formal documentation	Every worker knows the company value & missions. Hiring is done based on that value & mission principle. 3-day induction is provided to new employees. All employees belong to "The Dubai Golf Family", under a colleague treatment. Dubai Golf provides with a fantastic training program for individual professional development.

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Rest room, restaurant & prayer room for workers on site.

### C3 Communications

#### **C3.1 Engage golfers and members**

##### **C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors**

**(Club management)**  
Provide information on the facility's sustainability commitments, actions, or achievements

**Confirm** club's website, social media activity, awareness raising materials, internal notices, on course educational signage, mailing campaigns, links with external PR agencies, other awards or certifications, newspaper / magazine articles etc

Annual open day – free to come and walk around the course. Sports day celebration for work mates, residences inhabitants, etc.  
Members are encouraged to play golf; and golf members are encouraged to be club members.

#### **C3.2 Celebrate and promote sustainability**

##### **C3.2.1 Activities that raise awareness and engage people in the wider community**

**(Club management)**  
Provide evidence of external communications and community engagement

**Discuss** relations and partnership work with stakeholders, other businesses, suppliers / contractors, organisations, charities, educational establishments etc; open access to facilities; event hosting etc, which extend the

European Tour event celebration



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			reach and awareness of the club	
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