STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

WASTE DISCHARGE REQUIREMENTS AND WATER RECLAMATION REQUIREMENTS
ORDER NO. R3-2010-0010
WDID No. 3 431018001

FOR
LION'S GATE GOLF PARTNERS, L.L.C.
SANTA CLARA COUNTY
(PRODUCER AND USER OF RECYCLED WATER)

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds:

SITE OWNER AND LOCATION

1. Lion's Gate Golf Partners, L.L.C. (Discharger) developed the Lion's Gate Reserve, which comprises a golf course, lakes, a clubhouse, lodges, and 41 estate homesites contained in a 410-acre parcel of the 1,676-acre project.

2. For purposes of this Order, Lion's Gate Golf Partners, L.L.C. and the Lion's Gate Reserve Community Services District are hereafter designated "Discharger". The Lion's Gate Reserve is located at 1005 Highland Avenue in San Martin (Township 10 South, Range 3 East on the Gilroy and Mt. Madonna 7.5' USGS quadrangles) as shown on this Order's Attachment "A".

PURPOSE OF ORDER

3. Sterling Environmental Engineering filed a Report of Waste Discharge (ROWD) on behalf of the Discharger on July 22, 2009 in accordance with Sections 13260 and 13522.5 of the California Water Code. The ROWD describes existing and proposed waste discharges and recycled water use, which is tertiary-treated domestic wastewater from the Lion's Gate Reserve Wastewater Treatment Facility (reclamation plant).

4. Recycled water uses include landscape and grazing area irrigation and storage in landscape impoundments. The ROWD requests changes to waste discharge and water reclamation requirements that reflect monitoring data and to enable the Discharger to fill ornamental ponds (landscape impoundments) with recycled water.

SITE/FACILITY DESCRIPTION

5. The reclamation plant reduces bacteria in approximately 23,000 gallons per day of domestic wastewater to levels that allow the Discharger to irrigate landscape horticulture with the recycled water. The plant comprises a wetwell/lift station, a sequential batch reactor, a sludge digester, ozone disinfection, and wetland biofiltration. The treatment facility's design capacity is 30,000 gpd. This Order's Attachment "B" depicts the reclamation facility's location.

6. The Discharger uses recycled water supplied by the reclamation plant to irrigate restricted landscape buffers and equestrian grazing areas and to provide water to five decorative ponds. California Code of Regulations Title 22, Division 4, Chapter 1, Article 1, Section 60301.550 defines a landscape impoundment as *impoundments in which recycled water is stored or used for aesthetic enjoyment or landscape irrigation, or which otherwise serves similar purposes, and is not intended to include public*

contact." The Discharger's ornamental ponds comply with this definition of landscape impoundments. The Discharger shall post signage to inform the public that the ponds contain recycled water.

7. As shown in Table 1, the reclamation plant provides recycled water containing no pathogens for use in the landscape impoundments.

8. The eight-acre disposal area is located on slightly rolling topography consisting of clay loam soil.

9. The Discharger applies pesticides and fertilizers to maintain golf course fairways and greens.

10. The following table summarizes effluent monitoring results:

Table 1
Mean Effluent Monitoring Results

Constituent	2007	2008	2009
Average Daily Flow (Gallons/day)	20,000	14,700	17,000
BOD (mg/L)	5	4	4
Turbidity (NTU)	2	3	3
Total Suspended Solids (mg/L)	4	4	4
Total Dissolved Solids (mg/L)	485	460	615
Sodium (mg/L)	75	200	65
Chloride (mg/L)	101	350	165
Nitrate as N (mg/L)	5	1	1
Total coliform (MPN/100mL)	<1	<1	<1

11. The Regional Water Board has adopted the *Water Quality Control Plan, Central Coast Basin* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region.

12. The project lies in the Pájaro River Hydrologic Unit, specifically in the vicinity of Llagas Creek, whose beneficial uses include:

    a. Municipal and domestic water supply;
    b. Agricultural supply;
    c. Industrial service supply;
    d. Ground water recharge;
    e. Water Recreation;
    f. Non-contact water recreation;
    g. Warm fresh water habitat;
    h. Cold fresh water habitat;
    i. Wildlife habitat;
    j. Migration of aquatic organisms;
    k. Spawning, reproduction, and/or early development;
    l. Rare, threatened, or endangered species; and
    m. Commercial and sport fishing.

13. If not properly managed, discharge of domestic sanitary wastewater, pesticides, and fertilizers threaten to degrade the water quality of Llagas Creek and to impair its beneficial uses.

14. Present and anticipated beneficial uses of groundwater in the vicinity of the discharge include: Domestic, Municipal, Agricultural, and Industrial Supply.

15. Generally, depth to groundwater varies between around 4 to 6 feet. The Discharger reported characteristics of groundwater upgradient from the discharge (and therefore unaffected by it) as follows:

Table 2			
Mean background groundwater constituent concentrations, mg/L			
Constituent	**Year**		
	2007	**2008**	**2009**
Total Dissolved Solids	345	460	390
Sodium	26	25	20
Chloride	65	61	43
Nitrate (as N)	9	5	4

16. Section IV.VIII.D.3.f.7 of the Basin Plan specifies that discharge shall not consist of more than 40 grams per day of total nitrogen, on the average, per acre of total development overlying ground water recharge areas, unless local governing jurisdictions adopt Wastewater Management Plans subsequently approved by the Regional Board.

17. If not properly managed, the discharge of domestic sanitary wastewater, pesticides, and fertilizers could degrade groundwater underlying and downgradient from the discharge and surface waters near the discharge.

18. Title 22, Chapter 3 of the California Code of Regulations specifies State Department of Public Health's criteria for use of recycled water. Water Board staff consulted with the State Department of Public Health and the County Health Department regarding these reclamation requirements.

19. A priority of the Strategic Plan Update 2008-2012 for the Water Boards is to increase sustainable local water supplies available for existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and to ensure adequate water flows for fish and wildlife habitat. The State Water Resources Control Board (State Water Board) adopted the Recycled Water Policy (Resolution No. 2009-0011) on February 3, 2009. The Recycled Water Policy is intended to support the Strategic Plan priority. Increasing public acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change.

    The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The State Water Board recognizes that local water and wastewater entities, together with other local salt/nutrient contributors to the State's groundwaters, will fund and develop salt and nutrient management plans for each basin/sub-basin in California. Plan development will be locally driven and controlled, collaborative, and will be open to all stakeholders, including Regional Water Board staff. Plans will comply with CEQA. State Water Board's recognition of local control is in response to the December 19, 2008 letter from statewide water and wastewater entities, attached to Resolution No. 2009-0011, which adopted the Policy.

    It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board finds that the appropriate way to address salt and nutrient issues is through the development of regional or sub-regional salt and nutrient management plans rather than

through imposing requirements solely on individual projects. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements may be necessary to protect beneficial uses.

One of the primary components of the required regional salt/nutrient management plans is the development and implementation of groundwater basin/sub-basin monitoring programs. As specified in the Recycled Water Policy, salt/nutrient contributing stakeholders will be responsible for conducting, compiling, and reporting the monitoring data once the regional groundwater monitoring programs are developed.

Technical reports and data in Central Coast Water Board files document widespread and increasing salt and nutrient pollution in groundwater basins throughout the Central Coast Region, including the Pájaro River groundwater basin and sub-basins.

20. The Santa Clara County Board of Supervisors certified an Environmental Impact Report (EIR) for the proposed Lion's Gate Reserve project on July 23, 1996, in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations. All EIR mitigation measures intended to prevent nuisance and assure protection of beneficial uses of surface and groundwaters are hereby incorporated into this Order by reference.

21. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assume this and mitigate any potential adverse changes in water quality due to the discharge.

22. On June 3, 2010, the Board notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.

23. After considering all comments pertaining to this discharge during a public hearing on **September 2, 2010,** this Order was found consistent with the above findings.

THEREFORE, IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, Lion's Gate Golf Partners, L.L.C., the Lion's Gate Community Services District, their agents, successors, and assigns, may discharge waste at Lion's Gate Reserve, providing compliance is maintained with the following:

A. PROHIBITIONS

1. Discharge of treated wastewater to areas other than the lined effluent holding pond, decorative ponds, restricted landscape buffer, and/or equestrian grazing irrigation areas shown in Attachment B, is prohibited.

2. Discharge in excess of 40 grams per day of total nitrogen, on the average, per acre of total development overlying ground water recharge areas, unless local governing jurisdictions adopt Wastewater Management Plans subsequently approved by the Regional Board, is prohibited.

B. DISCHARGE SPECIFICATIONS

1. 30-day average effluent quality from the reclamation plant shall be as follows :

Table 3
Effluent quality

Constituent	Concentration
BOD	< 10 mg/L
TSS	< 10 mg/L
Total Nitrate	< 5 mg/L
Turbidity	< 3 NTU
Coliform	< 23 MPN/100mL

2. Recycled water from the reclamation plant shall be stored only in the impermeable effluent holding pond and the landscape impoundments. Pond freeboard shall be maintained at no less than two feet at all times.

3. Recycled water shall be contained within the irrigation area shown on Attachment A, without overflow, over-spray or bypass to adjacent drainageways, properties or stormdrains.

4. Recycled water shall not be applied within 100 feet of any well used for domestic purposes.

5. Irrigation with recycled water shall occur at a time and in a manner to prevent or minimize public contact with recycled water and to allow irrigated areas maximum opportunity to dry before use by the public. Drinking fountains shall be protected from direct or windblown spray of recycled water.

6. All disposal areas with public access and landscape impoundments shall be posted to warn the public that recycled water is being stored or used.

7. Personnel involved in producing, transporting or using treated wastewater shall be informed of possible hazards associated with contact or use of recycled water.

8. If tank trucks are used for transporting recycled water, they shall be appropriately labeled and shall not leak.

9. Recycled water valves, outlets, and other appurtenances shall be marked to differentiate recycled water facilities from potable water facilities. Proper backflow and cross-connection protection for domestic water services and irrigation wells shall be provided.

10. Recycled water valves, outlets, quick couplers and sprinklers shall be of a type, or secured in a manner, that permits operation only by authorized personnel. Use or installation of hose bibs on the treated wastewater system shall not be permitted.

11. Recycled water shall be applied at a rate and volume not to exceed vegetative demand and soil moisture holding conditions. Special precautions must be taken to prevent clogging of spray nozzles, over - watering and ponding, and to minimize runoff. Pipelines shall be maintained to prevent leaks.

12. Recycled water shall not be used for irrigation during periods of extended rainfall and/or runoff.

13. Recycled water systems shall be inspected on at least weekly to assure proper operation, absence of leaks, and absence of illegal connections.

C. RECEIVING WATER LIMITATIONS

1. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying ground waters, as determined by comparison of samples collected from groundwater monitoring wells located upgradient and downgradient of the disposal area.

2. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Articles 4, 4.5, 5 and 5.5 of the California Code of Regulations.

3. The discharge shall not cause concentrations of chemicals and radionuclides in surface water to exceed limits set forth in Title 22, Chapter 15, Articles 4, 4.5, 5 and 5.5 of the California Code of Regulations.

D. PROVISIONS

1. The Discharger shall comply with "Monitoring and Reporting Program No. R3-2010-0010," as specified by the Executive Officer.

2. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984.

3. Waste Discharge Requirements Order No. 97-50 is hereby rescinded, except for purposes of enforcement.

4. Pursuant to Title 23, Division 3, Chapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than **September 2, 2015**, addressing:

   a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,

   b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.

5. The Discharger shall maintain an ongoing salt/nutrient management program with the intent of reducing mass loading of salts and nutrients (with an emphasis on nitrogen species) in treated effluent to a level that will ensure compliance with effluent limitations and protect beneficial uses of groundwater.

   a. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial and residential dischargers. The salt/nutrient management program shall also address the concentration of salts in the wastewater treatment process as a result of excessive hydraulic retention times and/or chemical addition.

   b. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may also include source control (non-human waste from commercial and industrial sources) as appropriate.

   c. As part of the salt/nutrient management program, the Discharger shall submit an annual report of salt and nutrient reduction efforts. This salt/nutrient management report shall be included as part of the annual report described in Monitoring and Reporting Program No. R3-2010-0010. The report shall be submitted by January 30th, and shall include (at a minimum):

      Salt Component

      i. Calculations of annual salt mass discharged to (influent) and from (effluent) the

wastewater treatment or recycling facility with analysis of contributing sources;
ii. Analysis of wastewater evaporation/salt concentration effects;
iii. Analysis of groundwater monitoring results related to salt constituents;
iv. Analysis of potential adverse effects of salt loading on the groundwater basin;
v. A summary of existing salt reduction measures; and,
vi. Recommendations and time schedules for implementation of any additional salt reduction measures.

Nutrient Component

i. Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with analysis of contributing sources;
ii. Analysis of groundwater monitoring results related to nitrogen constituents;
iii. Analysis of potential impacts of nitrogen loading on the groundwater basin;
iv. A summary of existing nitrogen loading reduction measures; and,
v. Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.

d. As an alternative to the salt/nutrient management program requirements described above, upon Executive Officer approval, the Discharger may submit documentation and summary of participation in a regional salt/nutrient management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy). The Santa Clara Valley Water District is developing a regional plan. The Discharger shall participate in development and implementation of the plan.

6. The Discharger shall address water softener use within the Community Services District as follows:

a. Determine the number of self regenerating and canister water softeners in use, and
b. **By December 1, 2010**, submit a technical report for the approval of the Executive Officer. The report shall provide a time schedule for replacing all time-regenerating water softeners with canister softeners **by December 1, 2011**.
c. **By February 1, 2012,** a report, for the approval of the Executive Officer, describing the replacement of all self-regenerating water softeners with canister softeners.

7. The Regional Board may review and revise this Order at any time on its own motion.

I, ROGER BRIGGS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 2, 2010.

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Executive Officer