California REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

CEASE AND DESIST ORDER R7-2025-0008
FOR

DESERT KNOLL, INC.
DESERT KNOLL SUBDIVISION
WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL SYSTEMS
CITY OF TWENTYNINE PALMS, SAN BERNARDINO COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region, (Regional Water Board) finds that:

1. Desert Knoll, Inc. (Discharger) owns and operates a wastewater treatment and disposal system used to treat domestic wastewater generated from the Desert Knoll subdivision. The wastewater treatment facility is in a dirt area northeast of the intersection of Desert Knoll Avenue and Samarkand Drive in the City of Twentynine Palms.

2. The Discharger is regulated by Waste Discharge Requirements (WDRs) Order No. R7-2006-0057, adopted by the Regional Water Board on September 20, 2006. The WDRs state that the owner is Sunwest Development, LLC. On September 10, 2024, the Regional Water Board adopted Order No. R7-2024-0028 to update the facility owner to Desert Knoll, Inc. The Discharger is also regulated by Revised Monitoring and Reporting Program (Revised MRP) Order No. R7-2006-0057-01, issued by the Executive Officer on December 8, 2022.

3. The WDRs contain effluent limitations, prohibitions, specifications, and provisions necessary to protect the beneficial uses of the underlying groundwater and to prevent nuisance conditions from the discharge of waste.

DESCRIPTION OF FACILITY

4. The WDRs were adopted prior to construction and state that the subdivision will consist of 177 homes. As of 2024, 40 homes have been constructed. On November 5, 2024, Regional Water Board and State Water Resources Control Board (together “Water Board”) staff were informed that another developer “will purchase the balance of the Desert Knoll project and initially plans to build 40 homes.” Depending on the market the developer plans to build the remaining 97 homes. This will bring the development to the full number of 177 homes described in the WDRs.

5. According to the WDRs, the wastewater treatment facility (WWTF) will consist of an activated sludge package treatment plant that can operate in nitrification/denitrification mode. There will be two treatment trains, each with an extended aeration tank and secondary clarifier. The facility will be designed to treat 50,000 gallons per day (gpd) of

wastewater. The WDRs state that effluent will be disposed of using a GeoFlow subsurface drip irrigation system located on street parkways "B", "G", and "H" with six seepage pits to be used as backup when the subsurface irrigation system is inoperable. However, as discussed in Findings 12-14, (a) only three seepage pits have been installed and (b) the GeoFlow system was not installed on the parkways but on vacant land near the WWTF.

RELEVANT PROVISIONS OF WDRS ORDER NO. R7-2006-0057

6. Discharge Prohibition A.6 states "Discharge of wastewater from [the] WWTF, other than into the subsurface disposal system or the seepage pits described in Findings No. 4 and 5, above, is prohibited."

7. Discharge Prohibition A.7 states "Surfacing or overflow of effluent from the subsurface disposal system or the seepage pits is prohibited."

8. Provision E.10 states, in part, "The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment, and control which are installed or used by the Discharger to achieve compliance with the conditions of this Board Order, […] This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance. […] All systems in service or reserved shall be inspected and maintained on a regular basis. […]"

9. Discharge Specification B.2 states "Effluent from the WWTF shall not have a pH below 6.0 or above 9.0."

10. Discharge Specification B.7 states, in part, "WWTF effluent shall not exceed the following limits:

Constituent	Units	Monthly Average	Weekly Average	Daily Maximum
BOD_5[1]	mg/L	30	45	65
Total Suspended Solids	mg/L	30	45	65
Settleable Solids	mg/L	0.5	--	1.0
Nitrogen (as Total Nitrogen)	mg/L	10	15	20
TDS	mg/L	350	--	--

[1]5-day biochemical oxygen demand at 20^0C.

HISTORY OF VIOLATIONS

11. On January 3, 2013, Regional Water Board staff inspected the facility. Staff discussed minor improvements and did not note any violations. The inspection report states that 30 of the proposed 177 homes had been constructed, with five more homes in the process of being built.

12. On July 21, 2015, Regional Water Board staff inspected the facility. Staff observed three seepage pits to the east of the facility in an unfenced area and a GeoFlow subsurface irrigation system to the south of the facility. One of the two treatment trains was in use. No violations were noted.

13. On March 29, 2017, Regional Water Board staff inspected the facility and found that one of the two treatment trains was in use. In addition, staff observed surfacing wastewater in the GeoFlow field, in violation of Prohibition A.7 of the WDRs. On April 4, 2017, staff issued a Notice of Noncompliance, stating that waste could not be discharged to the GeoFlow field until it had been repaired. The inspection report, dated April 27, 2017, states that the Discharger submitted evidence of the repairs on April 10, 2017.

14. On May 9, 2022 State Water Board staff inspected the wastewater treatment facility. Staff found that the lift station had corroded and no longer worked; instead, temporary pumps and hoses were used to move the influent into the treatment basin. In addition, one of the two anoxic mixers was inoperable and the chlorinator was not being used. Treated wastewater was discharged outside of the fenced area to three seepage pits or the GeoFlow subsurface system. Although the WDRs state that wastewater will be discharged to landscaped parkways, the housing development was only partially built and there were no landscaped parkways near the WWTF. The failure to properly maintain the WWTF is a violation of Provision E.10 of the WDRs, while the failure to dispose of wastewater as described in Findings 4 and 5 of the WDRs is a violation of Prohibition A.6 of the WDRs.

15. On June 23, 2022, the Discharger was issued a Notice of Violation (NOV) for, among other items, failing to properly maintain and operate the WWTF and failing to consistently comply with the effluent limits for pH, biochemical oxygen demand, total suspended solids, total nitrogen, and total dissolved solids.

    The NOV states that the Discharger shall hire a California Registered Engineer and submit two reports: (a) documentation that all missing or non-operational components have been installed or a plan a timeline to install them, and (b) a description of, and

proposed timeline for, modifications to ensure that effluent will consistently meet effluent limits. This information was submitted, as described in Findings 18-22, below.

16. Attachment A to this Cease and Desist Order summarizes the Discharger's effluent limit violations from January 2021 through September 2024.

17. As shown in Attachment A, the Discharger has consistently violated the TDS effluent limit of 350 mg/L, with an average[1] effluent concentration of 576 mg/L. Finding 22 of the WDRs states, in part, that "[…] the TDS increase allowed for this subdivision is 200 mg/L [...]" However, the TDS effluent limit (350 mg/L) is lower than the average[1] TDS of the potable water (392 mg/L). It is not possible to comply with a TDS effluent limit that is lower than the TDS concentration in the potable water. If the effluent limit was 200 mg/L greater than the potable water (as anticipated by Finding 22), then the effluent limit would be 592 mg/L, and the Discharger would generally comply. This Order does not require strict compliance with the TDS effluent limit, but instead requires that the Discharger take reasonable steps to reduce the TDS of the effluent, such that it is less than 200 mg/L more than the TDS of the potable water supply. It is anticipated that the next revision of the WDRs will include a recalculated TDS effluent limit.

RECENT ACTIONS BY THE DISCHARGER

18. In response to the NOV, the Discharger hired a California Registered Engineer who then evaluated the wastewater treatment facility and submitted two reports.

19. On September 12, 2022, the Engineer submitted a report that described an inspection of the wastewater treatment facility and the status of the missing/non-operational components. Two items had been resolved, including replacing batteries so that the flow meters would record flows, and the anoxic mixer was in the process of being repaired.

20. On November 11, 2022, the Engineer submitted a WWTF modification plan. The plan stated that because the City of Twentynine Palms was planning a new regional POTW and the Desert Knoll subdivision would be one of the first areas served, the Discharger was hesitant to spend money on long-term improvements to the treatment plant[2]. The Engineer considered the potential for a regional POTW in the proposed implementation plan. The specific tasks and completion dates are listed below. A detailed explanation of each item was provided in Table 2 of the report.

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[1] Average from January 2021 through September 2024.

[2] A year later, on December 12, 2023, the City of Twentynine Palms decided not to pursue a regional POTW. Therefore, the Discharger must timely upgrade its wastewater treatment facility to comply with its WDRs. [Exhibit 21]

• Repair GeoFlow piping	March 30, 2023
• Design influent lift station rehab	March 30, 2023
• Obtain back-up aeration blower/motor	March 30, 2023
• Obtain back-up mixer	March 30, 2023
• Phase I install influent lift station rehab	September 30, 2023
• Phase II install influent lift station rehab	June 30, 2024
• Repair sludge tank	June 30, 2024

21. On November 21, 2022, Water Board staff formally approved the Discharger's proposal and timeline for the above modifications and requested that quarterly progress reports be submitted, beginning with the fourth quarter 2022 and continuing through the second quarter 2024. The final progress report was to include an evaluation of whether the modifications resulted in the WWTF's ability to continuously meet effluent limits, and if not, include a proposal for further upgrades.

22. The Discharger's management company submitted progress reports in January, April, July, and September 2023. The reports state that no work occurred during the first three quarters, but as of September 30, 2023, some GeoFlow repairs had been made, the lift station rehabilitation had been designed, and new motors had been obtained for the blower and mixer. However, no details are provided.

23. It appears that no work has taken place since submission of the September 2023 progress report. The WWTF still does not have a working influent lift station and it is not clear whether the necessary back-up parts are on-site. It is unknown whether the wastewater disposal area has the capacity to dispose of the permitted flow. Since the Notice of Violation was issued in June 2022, the treated effluent has exceeded the total nitrogen effluent limit 100% of the time, and has occasionally exceeded the biochemical oxygen demand, total suspended solids, and pH effluent limits. With respect to the total nitrogen exceedances, each of the monthly monitoring reports submitted since February 2024 state "Operations staff are continuing efforts on improving conditions to denitrify, including limiting dissolved oxygen in certain areas of the process." However, total nitrogen continues to exceed the effluent limit and Water Board staff are unsure as to exactly what improvements Operations staff are referring to.

24. In summary, despite being allowed two years to voluntarily upgrade the wastewater treatment facility, treated wastewater continues to significantly exceed the WDR's effluent limits and the Discharger is no longer taking steps to come into compliance.

REGULATORY CONSIDERATIONS

25. According to the WDRs, the WWTF discharges waste to groundwater within the Dale hydrologic unit. The WDRs also list the beneficial uses of this hydrologic unit as

municipal and domestic water supply and industrial service water supply. The failure to comply fully with the effluent limits of WDRs Order No. R7-2006-0057 threatens these beneficial uses.

26. Water Code section 13301 states, in part: “When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.”

27. The Regional Water Board finds that a discharge of waste is taking place in violation of WDRs Order No. R7-2006-0057, as described in the Findings of this Order. This Order requires the Discharger to take appropriate remedial action and to comply in accordance with the time schedule set forth below.

28. Water Code section 13267, subdivision (b) states, in part: “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region […] that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

29. The Discharger owns and operates the Desert Knoll wastewater treatment and disposal facility which is subject to WDRs Order No. R7-2006-0057 and this Cease and Desist Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in WDRs Order No. R7-2006-0057 and with this Order to ensure prevention of degradation to groundwater. The cost of producing the reports required by this Order is estimated to be $7,950, based on statewide rates for a project engineer. The cost of reports is relatively minor given the need to protect the beneficial uses of the groundwater beneath the wastewater treatment and disposal facility; therefore, the burden of production of these reports is reasonable.

30. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

31. After due notice to the Discharger, and all other affected persons, the Regional Water Board conducted a public hearing at which evidence was received to consider this Cease and Desist Order under Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED that, pursuant to sections 13301 and 13267 of the Water Code, the Discharger shall implement the following measures in order to return to compliance with its WDRs:

1. By **July 1, 2025**, submit **a report that includes** (a) the name and contact information for the California Registered Engineer or Certified Engineering Geologist that has been retained to complete the tasks described below and (b) a financing plan to ensure sufficient funds to complete the tasks described below and properly operate/maintain the wastewater treatment facility in the future.

   The report will also include (c) a workplan and timeline, prepared by a California Registered Engineer or Certified Engineering Geologist, describing the tasks and equipment needed to upgrade the WWTF so that it will consistently comply with the effluent limits for BOD, TSS, settleable solids, pH, and total nitrogen, as well as Provision E.10 of the WDRs. The workplan shall:
   (i) propose operational and physical changes necessary for consistent compliance with the total nitrogen effluent limit; and
   (ii) propose corrective actions/upgrades to the influent lift station, biological treatment system, clarification system, and sludge holding tank as described on Table 2 of the Engineer's submittal dated November 11, 2022.

   If any items have already been completed, then the workplan shall provide documentation of the work and the results. All tasks must be completed by **July 15, 2026**.

2. By **October 1, 2025**, submit a report prepared by a California Registered Engineer or Certified Engineering Geologist, evaluating the disposal capacity of the WWTF. In particular, the report shall:

   (a) include calculations of the total area irrigated with the existing GeoFlow system, and compare that value to the 150,000 square feet envisioned in Finding 4 of the WDRs;

   (b) evaluate whether the existing GeoFlow system, with the three seepage pits as

backup only[3], has the capacity to dispose of the 49,560 gpd allowed by the WDRs;

(c) describe whether the GeoFlow system is used as the primary disposal method, and if not, why not; and

(d) evaluate whether the seepage pits and GeoFlow system need to be fenced to prevent damage and vandalism.

If the disposal system cannot be operated as envisioned in the WDRs and/or does not have the capacity to dispose of 49,560 gpd, then the report shall propose improvements needed to comply with the WDRs. Improvements shall be completed by **July 15, 2026**.

3. By **February 1, 2026, and May 1, 2026**, submit a progress report, prepared by a California Registered Engineer or Certified Engineering Geologist, describing the steps taken to date toward upgrading the WWTF and disposal system. If additional steps are needed to bring the facility into compliance, the progress report shall identify the additional tasks.

4. By **August 1, 2026**, submit a report, prepared by a California Registered Engineer or Certified Engineering Geologist, certifying that all the WWTF upgrades, and operational changes proposed in Item 1 have been completed and that all disposal improvements proposed in Item 2 have been completed.

5. By **September 1, 2026**, the WWTF shall consistently treat wastewater to meet the WDR's effluent limits for BOD, TSS, settleable solids, pH, and total nitrogen. In addition, the Discharger shall take reasonable steps to reduce the TDS of the effluent, such that it is less than 200 mg/L over the TDS of the potable water supply.

6. The Regional Water Board has transitioned to a paperless office. Therefore, all technical reports required by this Order must be converted to searchable pdf files and submitted via email to the Regional Water Board's paperless mailbox at RB7-wdrs_paperless@waterboards.ca.gov.

7. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately

[3] Finding 5 of the WDRs states that "Six (6) seepage pits are proposed for use when parts of the subsurface irrigation system are inoperative due to maintenance or repair."

qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.

8. Any person signing a document submitted under this Order shall make the following certification:

> *"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

The Executive Officer or their delegee may extend the deadlines contained in this Order if the Discharger demonstrates that circumstances beyond the Discharger's control have created delays, provided that the Discharger continues to undertake all appropriate measures to meet the deadlines. The Discharger shall make any deadline extension request in writing at least **30 days** prior to the deadline. The Discharger must obtain written approval from the Executive Officer or their delegee for any departure from the time schedule shown above. Failure to obtain written approval for any departures may result in further enforcement action.

If, in the opinion of the Executive Officer or their delegee, the Discharger fails to comply with the provisions of this Order, the Executive Officer or their delegee may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or the WDRs may result in the assessment of Administrative Civil Liability of up to $5,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268 and 13350. The Regional Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

I, Michael Placencia, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order issued by the California Regional Water Quality Control Board, Colorado River Basin, **on April 1, 2025**.

Original signed by
Michael Placencia, Executive Officer

Attachment A: Summary of Effluent Limit Violations

Attachment A to CDO R7-2024-0008
Desert Knoll Inc., San Bernardino County

Monitoring results are collated from the Discharger's self-monitoring reports from January 2021 through September 2024. Constituents listed are those required to be monitored per the Monitoring and Reporting Program. WDR effluent limits are in (). Results in bold and yellow highlighting exceed the effluent limits. If multiple samples were collected within a month, the results are averaged for comparison to the monthly limits. "NR" means not reported.

Month/ Year	Effluent Limits and Results							
	BOD, mg/L (30 monthly/ 45 weekly / 65 max daily)	TSS, mg/L (30 monthly/ 45 weekly/ 65 max daily)	Settleable Solids, mg/l 0.5 monthly/ 1.0 daily)	Total N, mg/L (10 monthly/ 15 weekly/ 20 daily)	pH- (6-9)	TDS, mg/L (350 monthly)	Flow (49,560 gpd)	Potable TDS, mg/l (no limit)
Sep 2024	5	6	<0.5	**18**	7.2	**600**	5,874	370
Aug 2024	<5	4	<0.1	**27**	6.5	**625**	7,161	460
July 2024	<5	5	<0.5	**17**	7.1	**530**	8,058	350
June 2024	<10	7	<0.1	**17**	7.3	**495**	7,274	340
May 2024	<10	7	<0.1	**20**	7.6	**470**	6,790	330
Apr 2024	**68**	**34**	0.15	**53**	7.3	**565**	6,452	440
Mar 2024	**88**	26	<0.1	**38**	7.4	**635**	6,981	470
Feb 2024	<5	2	<0.1	10	7.8	**550**	7,714	430
Jan 2024	<15	11	<0.1	**18**	6.6	**475**	6,690	410
Dec 2023	21	8	<0.1	**17**	8.0	**560**	7,403	210
Nov 2023	<5	**37**	<0.1	**21**	7.2	**510**	6,452	310
Oct 2023	15	16	<0.1	**18**	7.2	**520**	6,148	330
Sep 2023	13	7	<0.5	**16**	7.5	**510**	4,584	330
Aug 2023	**33.5**	6	<0.5	**19**	7.2	**555**	2,948	400
July 2023	<10	3	<0.1	**18**	7.0	**565**	6,961	440
Jun 2023	<30	8	<0.5	**23**	6.9	**630**	**NR**	390
May 2023	<10	16	<0.1	**34**	6.2	**630**	5,784	290

Month/ Year		Effluent Limits and Results						
	BOD, mg/L (30 monthly/ 45 weekly / 65 max daily)	TSS, mg/L (30 monthly/ 45 weekly/ 65 max daily)	Settleable Solids, mg/l 0.5 monthly/ 1.0 daily)	Total N, mg/L (10 monthly/ 15 weekly/ 20 daily)	pH- (6-9)	TDS, mg/L (350 monthly)	Flow (49,560 gpd)	Potable TDS, mg/l (no limit)
April 2023	12	9	<0.1	23	6.9	**525**	6,377	320
Mar 2023	<10	11	<0.1	**31**	6.0	**615**	7,506	340
Feb 2023	8.6	14	<0.1	**31**	6.5	**560**	5,700	260
Jan 2023	<10	10	<0.1	**29**	6.6	**550**	6,550	410
Dec 2022	**49**	20	<0.1	**46**	7.7	**570**	6,615	380
Nov 2022	12	20	<0.1	**40**	**5.6**	**640**	14,707	410
Oct 2022	<20	11	<0.1	**32**	6.6	**640**	**NR**	360
Sep 2022	<10	8	<0.1	**11**	7.5	**530**	**NR**	420
Aug 2022	<5	8	<0.1	**28**	6.5	**630**	**NR**	430
July 2022	<10	10	<0.1	**19**	7.0	**580**	4,536	450
Jun 2022	<5	3	<0.5	**13**	7.4	**550**	4,394	430
May 2022	19	14	<0.5	**32**	7.7	**620**	4,323	420
April 2022	**32**	14	<0.5	**18**	7.5	**410**	4,167	390
Mar 2022	ND	26	0.1	**45**	**5.6**	**660**	5,033	390
Feb 2022	11	22	<0.1	**42**	**5.7**	**640**	4,414	620
Jan 2022	12	7	<0.1	**35**	7.7	**570**	5,165	220
Dec 2021	**37**	21	<0.1	**40**	7.7	**560**	5,029	370
Nov 2021	<5	5	<0.1	**28**	6.1	690	5,036	430
Oct 2021	26	17	<0.1	**61**	7.9	**600**	5,961	430
Sep 2021	21	19	<0.1	**45**	7.8	**580**	5,037	410
Aug 2021	<5	4	<0.1	**29**	6.6	**620**	4,226	440
July 2021	<5	6	<0.1	**21**	7.3	**620**	3,052	380
Jun 2021	17	12	<0.1	**39**	7.3	**690**	7,077	430

Month/ Year		Effluent Limits and Results						
	BOD, mg/L (30 monthly/ 45 weekly / 65 max daily)	TSS, mg/L (30 monthly/ 45 weekly/ 65 max daily)	Settleable Solids, mg/l 0.5 monthly/ 1.0 daily)	Total N, mg/L (10 monthly/ 15 weekly/ 20 daily)	pH- (6-9)	TDS, mg/L (350 monthly)	Flow (49,560 gpd)	Potable TDS, mg/l (no limit)
May 2021	**140**	**46**	<0.1	lab error	7.2	**480**	4,152	490
Apr 2021	<5	**41**	<0.1	**37**	**5.0**	**670**	11,070	420
Mar 2021	29	**44**	<0.1	**37**	6.0	**650**	6,471	430
Feb 2021	19	24	<0.1	**53**	6.2	**550**	7,034	390
Jan 2021	<5	8	<0.1	**37**	6.4	**600**	6,612	420