STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BROWARD COUNTY, a political)		
subdivision of the State of Florida,)		
)		
Petitioner,)		
)		
v.)	OGC CASE NO.	20-1158
)	DOAH CASE NO.	21-1139
DEPARTMENT OF ENVIRONMENTAL)		
PROTECTION,)		
)		
Respondent.)		
200 Apr 10 200			

FINAL ORDER

An Administrative Law Judge (ALJ) with the Division of Administrative Hearings (DOAH) on March 30, 2022, submitted a Recommended Order (RO) to the Department of Environmental Protection (DEP or Department) in the above-captioned administrative proceeding. A copy of the RO is attached hereto as Exhibit A. DEP timely filed exceptions on April 29, 2022. The Petitioner, Broward County, a political subdivision of the State of Florida (Broward County or County) timely filed exceptions on April 29, 2022. Broward County timely filed a response to DEP's exceptions on May 19, 2022.

This matter is now before the Secretary of the Department for final agency action.

¹ On April 1, 2022, the Parties filed a Joint Motion for Extension of Time to File Exceptions to Recommended Order and Responses to Exceptions, in which the parties waived the Department's 45-day deadline to issue its final order in this case until June 8, 2022. On April 5, 2022, the Department issued an order granting the Joint Motion for Extension of Time to File Exceptions to the Recommended Order and Responses to Exceptions. See Op. Att'y Gen. Fla. 77-41 (1977); Yesterday's Ret. Manor, Inc. v. Dep't of Health & Rehab. Services, DOAH Case No. 81-3046 (Fla. DOAH March 7, 1983; Fla. DHRS April 18, 1983) (Statutory deadlines for issuance of a permit or license are a "substantive right that may be freely and voluntarily waived.")

BACKGROUND

On July 8, 2020, the Department notified Broward County by letter (the HLD Letter) that the underground injection of domestic wastewater through its underground injection control wells (UIC wells or injection wells), as authorized by Permit Nos. 334636-001-006-UO/1M and 334636-007-008-UC/IM, has caused, or may cause, the movement of fluid into an underground source of drinking water (USDW), such that the County is required to meet the high-level disinfection (HLD) requirement in 40 C.F.R. § 146.15, to continue operating its UIC wells.

On March 1, 2021, Broward County filed a petition for administrative hearing challenging DEP's determination that fluid movement has occurred due to operation of the UIC wells such that high-level disinfection must be implemented. On March 25, 2021, Broward County's petition was referred to DOAH for an administrative hearing.

On July 1, 2021, DEP filed a motion to relinquish jurisdiction or, in the alternative, motion in limine (DEP's Motion in Limine). On October 6, 2021, the County filed a motion to strike DEP's expert witnesses and reports, or in the alternative, motion in limine to limit witness testimony (Broward County's Motion to Strike DEP Witnesses).

On October 7, 2021, ALJ Sellers ruled ore tenus on the remaining issues raised in DEP's Motion in Limine, granting DEP's request to exclude evidence regarding the cost of implementing high-level disinfection, on the basis that it was not a relevant consideration under the applicable Florida rules and federal regulations regarding whether high-level disinfection should be imposed. Additionally, ALJ Sellers granted in part, and denied in part, Broward County's motion for leave to file an amended petition and denied the County's Motion to Strike DEP Witnesses.

The final hearing was conducted on October 7, 11-14, 25, and November 2, 2021.

DEP presented the testimony of Cathleen McCarty and Cindy Fischler. DEP Exhibit Nos. 1-297; 1-300; 1-303; 1-305; 1-307; 1-308; 1-311; 1-380 (pages 3690 through 3789 only); 1-381; 1-477; 1-478; 1-504; 1-510; 1-548; 1-566; 1-569; 1-587 (page 15730 only); 1-597; 1-1680; 3; 4; and 13 were admitted into evidence without objection, and DEP Exhibit Nos. 1-309; 1-1359; 1-1361 through 1-1669; 1-1657; 2; 13; and 15 (except for Figures 11 and 12) were admitted into evidence over objection.

Broward County presented the testimony of Dr. Thomas Missimer, Dr. Robert Maliva, Patrick Davis, and Alan Garcia. County Exhibit Nos. 1-2; 1-14; 1-17 through 1-19; 1-21; 1-22; 1-28; 1-34; 3-1; 3-5; 4-1; 5-1; and 5-12 were admitted into evidence without objection, and County Exhibit No. 4-3, pages 0027, 0030, and 0032, were admitted into evidence over objection.

At the conclusion of the final hearing, the parties agreed that the County would file its offer of proof of evidence that was excluded within 15 days of the date the transcript of the final hearing was filed at DOAH, and the parties would file their proposed recommended orders thirty (30) days after that date. On January 31, 2022, the parties timely filed their proposed recommended orders, both of which were duly considered by the ALJ in preparing her RO.

SUMMARY OF THE RECOMMENDED ORDER

In the RO, the ALJ recommended that the Department enter a final order "(1) determining that DEP failed to demonstrate that [Broward] County's UIC wells have caused or may cause fluid movement into a USDW as prohibited by chapter 62-528 and the incorporated federal regulations; (2) ordering that the County is not required to implement high-level disinfection at the Plant; and (3) rescinding the HLD Letter." In doing so, the ALJ concluded that DEP failed to sustain its burden to demonstrate that Broward County's UIC wells have caused or

may cause fluid movement into a USDW as prohibited by chapter 62-528 and the incorporated federal regulations.

STANDARDS OF REVIEW FOR DOAH RECOMMENDED ORDERS

Section 120.57(1)(1), Florida Statutes, prescribes that an agency reviewing a recommended order may not reject or modify the findings of fact of the ALJ "unless the agency first determines from a review of the entire record, and states with particularity in the order, that the findings of fact were not based on competent substantial evidence." § 120.57(1)(I), Fla. Stat. (2021); Charlotte Cnty. v. IMC Phosphates Co., 18 So. 3d 1079, 1082 (Fla. 2d DCA 2009); Wills v. Fla. Elections Comm'n, 955 So. 2d 61, 62 (Fla. 1st DCA 2007). The term "competent substantial evidence" does not relate to the quality, character, convincing power, probative value or weight of the evidence. Rather, "competent substantial evidence" refers to the existence of some evidence as to each essential element and as to its admissibility under legal rules of evidence. See e.g., Scholastic Book Fairs, Inc. v. Unemployment Appeals Comm'n, 671 So. 2d 287, 289 n.3 (Fla. 5th DCA 1996); Nunez v. Nunez, 29 So. 3d 1191, 1192 (Fla. 5th DCA 2010).

A reviewing agency may not reweigh the evidence presented at a DOAH final hearing, attempt to resolve conflicts therein, or judge the credibility of witnesses. See, e.g., Rogers v. Dep't of Health, 920 So. 2d 27, 30 (Fla. 1st DCA 2005); Belleau v. Dep't of Env't. Prot., 695 So. 2d 1305, 1307 (Fla. 1st DCA 1997); Dunham v. Highlands Cnty. School Bd., 652 So. 2d 894, 896 (Fla. 2d DCA 1995). If there is competent substantial evidence to support an ALJ's findings of fact, it is irrelevant that there may also be competent substantial evidence supporting a contrary finding. See, e.g., Arand Constr. Co. v. Dyer, 592 So. 2d 276, 280 (Fla. 1st DCA 1991); Conshor, Inc. v. Roberts, 498 So. 2d 622, 623 (Fla. 1st DCA 1986).

The ALJ*s decision to accept the testimony of one expert witness over that of another expert is an evidentiary ruling that cannot be altered by a reviewing agency, absent a complete lack of any competent substantial evidence of record supporting this decision. See, e.g., Peace River/Manasota Reg'l Water Supply Auth. v. IMC Phosphates Co., 18 So. 3d 1079, 1088 (Fla. 2d DCA 2009); Collier Med. Ctr. v. State, Dep't of HRS, 462 So. 2d 83, 85 (Fla. 1st DCA 1985); Fla. Chapter of Sierra Club v. Orlando Utils. Comm'n, 436 So. 2d 383, 389 (Fla. 5th DCA 1983). In addition, an agency has no authority to make independent or supplemental findings of fact. See, e.g., North Port, Fla. v. Consol. Minerals, 645 So. 2d 485, 487 (Fla. 2d DCA 1994); Fla. Power & Light Co. v. Fla. Siting Bd., 693 So. 2d 1025, 1026-27 (Fla. 1st DCA 1997).

Section 120.57(1)(1), Florida Statutes, authorizes an agency to reject or modify an ALI's conclusions of law and interpretations of administrative rules "over which it has substantive jurisdiction." See Barfield v. Dep't of Health, 805 So. 2d 1008, 1012 (Fla. 1st DCA 2001); L.B. Bryan & Co. v. Sch. Bd. of Broward Cnty., 746 So. 2d 1194, 1197 (Fla. 1st DCA 1999); Deep Lagoon Boat Club, Ltd. v. Sheridan, 784 So. 2d 1140, 1141-42 (Fla. 2d DCA 2001). If an ALJ improperly labels a conclusion of law as a finding of fact, the label should be disregarded, and the item treated as though it were actually a conclusion of law. See, e.g., Battaglia Properties v. Fla. Land and Water Adjudicatory Comm'n, 629 So. 2d 161, 168 (Fla. 5th DCA 1994).

However, the agency should not label what is essentially an ultimate factual determination as a "conclusion of law" to modify or overturn what it may view as an unfavorable finding of fact. See, e.g., Stokes v. State, Bd. of Pro. Eng'rs, 952 So. 2d 1224, 1225 (Fla. 1st DCA 2007).

Furthermore, agency interpretations of statutes and rules within their regulatory jurisdiction do not have to be the only reasonable interpretations. It is enough if such agency interpretations are "permissible" ones. See, e.g., Suddath Van Lines, Inc. v. Dep't of Env't. Prot., 668 So. 2d 209,

212 (Fla. 1st DCA 1996). The Department is charged with enforcing and interpreting chapters 161, 373 and 403 of the Florida Statutes. As a result, DEP has substantive jurisdiction over interpretation of these statutes and the Department's rules adopted to implement these statutes.

Agencies do not have jurisdiction, however, to modify or reject rulings on the admissibility of evidence. Evidentiary rulings of the ALJ that deal with "factual issues susceptible to ordinary methods of proof that are not infused with [agency] policy considerations," are not matters over which the agency has "substantive jurisdiction." See Martuccio v. Dep't of Pro. Regul., 622 So. 2d 607, 609 (Fla. 1st DCA 1993); Heifetz v. Dep't of Bus. Regul., 475 So. 2d 1277, 1281-82 (Fla. 1st DCA 1985). Evidentiary rulings are matters within the ALJ's sound "prerogative . . . as the finder of fact" and may not be reversed on agency review. See Martuccio, 622 So. 2d at 609.

RULINGS ON EXCEPTIONS

In reviewing a recommended order and any written exceptions, the agency's final order "shall include an explicit ruling on each exception." See 120.57(1)(k), Fla. Stat. (2021). The agency, however, need not rule on an exception that "does not clearly identify the disputed portion of the recommended order by page number or paragraph, that does not identify the legal basis for the exception, or that does not include appropriate and specific citations to the record." Id.

A party that files no exceptions to certain findings of fact "has thereby expressed its agreement with, or at least waived any objection to, those findings of fact." Env't Coal. of Fla., Inc. v. Broward Cnty., 586 So. 2d 1212, 1213 (Fla. 1st DCA 1991); see also Colonnade Med. Ctr., Inc. v. State of Fla., Agency for Health Care Admin., 847 So. 2d 540, 542 (Fla. 4th DCA 2003). However, an agency head reviewing a recommended order is free to modify or reject any

erroneous conclusions of law over which the agency has substantive jurisdiction, even when exceptions are not filed. See § 120.57(1)(1), Fla. Stat. (2021); Barfield, 805 So. 2d at 1012; Fla. Pub. Emp. Council, v. Daniels, 646 So. 2d 813, 816 (Fla. 1st DCA 1994).

RULINGS ON BROWARD COUNTY'S EXCEPTIONS

Broward County's Exception to Paragraph No. 10

Broward County takes exception to the last sentence in paragraph no. 10 of the RO that appears from the context of the paragraph to contain a scrivener's error. Paragraph no. 10 of the RO reads in its entirety:

10. Permit No. 334636-007-008-UC/IM, which was issued in 2017 ("2017 Permit"), authorizes the operational testing of UIC wells IW-7, IW-8, and monitor well MW-6. For reasons addressed below, IW-7 and IW-8 currently are not operating. IW-6 is an operating monitor well.

(RO ¶ 10) (emphasis added).

Paragraph no. 10 of the RO provides that the 2017 Permit authorizes Injection Wells (IW) IW-7, IW-8 and Monitor Well (MW) MW-6. Paragraph no. 10 then provides that IW-7 and IW-8 are not operating, but "IW-6 is an operating *monitor* well." (RO ¶ 10, emphasis added). Reading the last sentence of the RO in context, the Department concludes that paragraph no. 10 does contain a scrivener's error – the ALJ intended to provide that "MW-6" and not "IW-6" is "an operating monitor well." This scrivener's error is deemed to be a purely clerical matter constituting harmless error that has no effect on the ultimate disposition of this proceeding. See § 120.57(1)(1), Fla. Stat. (2021).

Based on the foregoing reasons, Broward County's exception to paragraph no. 10 is granted.

² Individual monitoring wells are labeled "MW-" followed by the well number. Individual injection wells are labeled "IW-" followed by the well number.

Broward County's Exception to Paragraph No. 112

Broward County takes exception to a portion of the ALJ's findings of fact in the first sentence of RO paragraph no. 112, alleging that "the LMZ for MW-4 was located closer to an approximate depth of two hundred (200) feet below the base of the Upper Floridan Aquifer rather than one thousand (1,000) feet below it." Broward County's Exceptions, p. 5.

Broward County disagrees with the ALJ's finding of fact and seeks to have the Department reweigh the evidence. However, the Department is not authorized to reweigh evidence presented at a DOAH final hearing, attempt to resolve conflicts therein, or judge the credibility of a witness. See, e.g., Rogers, 920 So. 2d at 30; Belleau, 695 So. 2d at 1307.

Moreover, Broward County never alleged that the finding of fact lacked competent substantial evidence to support the ALJ's finding. DEP need not rule on this exception, since it does not identify the legal basis for the exception or include appropriate and specific citations to the record. See 120.57(1)(k), Fla. Stat. (2021).

Based on the foregoing reasons, Broward County's exception to paragraph no. 112 is denied.

Broward County's Exception Requesting Complete Listing of Admitted Exhibits in the RO

Broward County takes exception to a list of exhibits admitted into evidence as identified in the Preliminary Statement of the RO, alleging that the list inadvertently omits several exhibits that were admitted at hearing. (RO ¶ 4-5).

Broward County contends that BC 1-34 was inadvertently omitted from the RO's list of Broward County exhibits admitted into evidence. (ALJ Sellers, T. Vol. 5, p. 699). Broward County next contends that BC 1-18 and BC 1-19 were inadvertently omitted from the RO's list of Broward County exhibits admitted into evidence. (ALJ Sellers, T. Vol. 11, p. 1539, lines

19-22; ALJ Sellers, T. Vol. 11, p. 1540, lines 1-6). Lastly, Broward County contends that DEP 1-580, DEP 1-510, and DEP 1-1680 were inadvertently omitted from the RO's list of DEP exhibits admitted into evidence. (ALJ Sellers, T. Vol. 11, p. 1525, lines 7-8; ALJ Sellers, T. Vol. 11, p. 1526, lines 1-12; ALJ Sellers, T. Vol. 11, p. 1541, lines 5-19). The transcript supports that all the exhibits identified above by Broward County were admitted at the hearing; however, each of the above identified exhibits was listed in the RO as admitted into evidence.

Based on the foregoing reasons, Broward County's exception regarding the RO's omission in the Preliminary Statement of several admitted exhibits is denied as unnecessary.

RULINGS ON DEP'S EXCEPTIONS

DEP's Exception to Paragraph No. 10

DEP takes exception to the last sentence in paragraph no. 10 of the RO alleging it contains a scrivener's error. DEP contends that the ALJ intended for "IW-6" in the last sentence to read "MW-6." As discussed above in ruling on Broward County's exception to paragraph no. 10 of the RO, the ALJ' reference to "IW-6" instead of "MW-6" constitutes a scrivener's error. This scrivener's error is deemed to be a purely clerical matter constituting harmless error that has no effect on the ultimate disposition of this proceeding. See § 120.57(1)(1), Fla. Stat. (2021).

Based on the foregoing reasons, including those identified in response to the County's exception to RO paragraph no. 10, DEP's exception to paragraph no. 10 is granted.

DEP's Exception to Paragraph No. 25

DEP takes exception to the RO's citation to DEP Exhibit 1-13 in footnote 4 to paragraph no. 25, which it contends was not admitted into evidence. DEP requests that the reference to DEP Exhibit 1-13 be excluded from the final order.

The Department has been unable to locate competent substantial evidence to support the RO's reference to DEP Exhibit 1-13 in footnote 4 of the RO, which footnote reads in its entirety "DEP Exhibit 1-13, Bates pages 263-265." Consequently, footnote 4 to paragraph no. 25 of the RO is stricken by the Department. Footnote 4 to paragraph no. 25 of the RO involves dated history to UIC wells IW-1 through IW-4 dating back to 1988 and is deemed to have no bearing on the outcome of this case. This clerical mistake constitutes harmless error that has no effect on the ultimate disposition of this proceeding. See § 120.57(1)(1), Fla. Stat. (2021).

Based on the foregoing reasons, the Petitioners' exception to paragraph no. 25 is granted.

DEP's Exception to Paragraph No. 57

DEP takes exception to the RO's citation in paragraph no. 57 to rule 62-528.200(6), Florida Administrative Code, alleging the citation appears to be a scrivener's error.

Paragraph no. 57 of the RO reads in its entirety:

57. "Confining zone" is a geologic formation, group of formations, or part of a formation that is capable of limiting fluid movement from an injection zone. Fla. Admin. Code R. 62-528.200(6).

(RO ¶ 57) (emphasis added).

The Department concludes that the RO's reference in paragraph no. 57 to rule 62-528.200(6) constitutes a scrivener's error. The ALJ must have intended to cite to rule 62-528.200(15), Florida Administrative Code, because rule 62-528(15) defines "confining zone," while rule 62-528.200(6) defines "aquifer."

This scrivener's error is deemed to be a purely clerical mistake constituting harmless error that has no effect on the ultimate disposition of this proceeding. See § 120.57(1)(1), Fla. Stat. (2021).

Based on the foregoing reasons, DEP's exception to paragraph no. 57 is granted.

DEP's Exception to Paragraph No. 88

DEP takes exception to paragraph no. 88 of the RO, alleging that the ALJ "ignore[d] that underground injection is also prohibited if injection may cause fluid movement." DEP's Exceptions, p. 4.

DEP does not allege there is no competent substantial evidence to support paragraph no. 88 of the RO; instead, DEP contends that the ALJ failed to consider a factor that should have been included in this paragraph. However, an agency has no authority to make supplemental findings of fact to those contained in the RO. See, e.g., North Port, Fla., 645 So. 2d at 487; Fla. Power & Light Co., 693 So. 2d at 1026-1027.

Moreover, the ALJ did consider whether Broward County's underground injection wells "may" cause fluid movement. The ALJ concluded in paragraph no. 172 of the RO that DEP failed to sustain its burden to establish that the County's UIC wells have caused *or may cause* fluid movement into a USDW as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations. (RO ¶ 172).³

Based on the foregoing reasons, DEP's exception to paragraph no. 88 is denied.

DEP's Exception to Paragraph No. 89

DEP takes exception to paragraph no. 89 of the RO, which provides, in its entirety:

89. For the reasons discussed below, it is determined that the competent, substantial, credible, and persuasive evidence establishes that the injection of treated wastewater through UIC wells IW-1 through IW-6 has not caused prohibited fluid movement

³ In addition, the ALJ's conclusion that DEP failed to demonstrate that Broward County's UIC wells "may" cause fluid movement into a USDW is supported by competent, substantial evidence. *See*, e.g., Missimer, T. Vol. 6, p. 741, lines 8-17; Missimer T. Vol. 6, p. 742, line 20 – p. 743, line 9; Missimer, T. Vol. 6, p. 743, line 10 – p. 744, line 5; Missimer, T. Vol. 6, p. 758, line 25 – p. 760, line 3; Missimer, Vol. 6, p. 822, lines 11-15; Missimer, Vol. 6, p. 831, lines 8-12; Davis, Vol. 9, p. 1093, line 25 – p. 1096, line 12; Maliva, Vol. 9, p. 1159, lines 15 – p. 1160, line 3; Missimer, Vol. 10, p. 1286, lines 9-21

into a USDW at the Site such that high-level disinfection must be implemented at the Plant.

(RO¶89).

DEP "takes exception to this finding of fact, as it does not address whether the competent, substantial, credible and persuasive evidence established that the injection at the Site may cause prohibited fluid movement into a USDW." DEP's Exceptions, p. 4.

DEP does not allege there is no competent substantial evidence to support paragraph no. 89 of the RO; instead, DEP contends that the ALJ failed to consider a factor that should have been included in this paragraph. However, an agency has no authority to make supplemental findings of fact to those contained in the RO. See, e.g., North Port, Fla., 645 So. 2d at 487; Fla. Power & Light Co., 693 So. 2d at 1026-1027.

Moreover, the ALJ did consider whether Broward County's underground injection wells "may" cause fluid movement. The ALJ concluded in paragraph no. 172 of the RO that DEP failed to sustain its burden to establish that the County's UIC wells have caused *or may cause* fluid movement into a USDW as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations. (RO ¶ 172).4

Based on the foregoing reasons, DEP's exception to paragraph no. 89 is denied.

DEP's Exception to Paragraph No. 112

DEP takes exception to a portion of the ALJ's findings of fact in the first sentence of RO paragraph no. 112, which provides, in pertinent part, that "the LMZ for MW-4 was located at an interval of 1, 580 to 1630 feet bls, which was in the Middle Confining Unit, over 1,000 feet below the base of the Upper Floridan Aquifer" DEP's Exceptions, p. 4. DEP alleges that

⁴ See footnote 3 above, ruling on DEP's exception to paragraph no. 88 of the RO, which is incorporated by reference into this ruling.

this sentence contains a scrivener's error in which the "over 1,000 feet" was intended to be "over 100 feet." DEP's allegation that the number 1,000 should read 100 is supported by competent substantial evidence in the transcript and Broward County's exhibits. (McCarty, Vol. 2, p. 225, lines 12-14) ("Q. What about the lower monitoring zone for monitoring well four? A. 1,580 to 1,630 feet BLS.) (County Ex. No. 4-3, p. 27). See also RO ¶ 95.

This scrivener's error is deemed to be a purely clerical matter constituting harmless error that has no effect on the ultimate disposition of this proceeding. See § 120.57(1)(1), Fla. Stat. (2021).

Based on the foregoing reasons, DEP's exception to paragraph no. 112 is granted.

DEP's Exception to Paragraph Nos. 130, 140, 168 and 170

DEP takes exception to the portion of paragraph no. 130 of the RO, which states "to the extent fluid movement occurs during well construction, such movement is temporary only, and does not constitute permanent fluid movement into a USDW," alleging the ALJ created a requirement that does not exist under 40 C.F.R. 144, 40 C.F.R. 146, or chapter 62-528, Florida Administrative Code. Similarly, DEP took exception to analogous language in RO paragraph nos. 140, 168, and 170, alleging that the Department should exclude "this finding of fact as well as the finding in paragraph no. 140, and the conclusions in paragraph nos. 168 and 170, based on the absence of evidence of permanent fluid movement." DEP's Exceptions, p. 5.

The ALJ disagreed with DEP's position regarding fluid movement during construction of monitoring and injection wells. For example, paragraph nos. 139 and 140 of the RO, provide, in their entirety:

139. DEP also posited that, even if the fluid movement into the monitor zones at MW-6 was not caused by the injection of wastewater but instead was related to the construction of IW-7 and IW-8, chapter 62-528 and 40 C.F.R. §§ 144.12(a) and 146.15

nonetheless have been violated, so that high-level disinfection must be implemented at the Plant.

140. The undersigned rejects this position as contrary to the competent, substantial, and credible evidence in this proceeding. Here, the construction permits issued by DEP for the UIC and monitor wells, including IW-7 and IW-8, authorized the use of the reverse air circulation well-drilling method to construct IW-7 and IW-8. Thus, the construction activity, which resulted in the temporary movement of some wastewater constituents into transmissive strata, as evidenced in MW-6, was authorized by DEP, and, therefore, cannot, as a matter of fact, constitute a violation of DEP rules and incorporated federal regulations warranting the implementation of high-level disinfection.

(RO ¶ 139, 140) (emphasis added to ¶ 139).

DEP disagrees with the ALJ's finding and seeks to have the Department reweigh the evidence. However, the Department is not authorized to reweigh evidence presented at a DOAH final hearing, attempt to resolve conflicts therein, or judge the credibility of a witness. See, e.g., Rogers, 920 So. 2d at 30; Belleau, 695 So. 2d at 1307. If there is competent substantial evidence to support the ALJ's findings of fact, it is irrelevant that there may also be competent substantial evidence supporting a contrary finding. See, e.g., Arand Construction Co., 592 So. 2d at 280; Conshor, Inc., 498 So. 2d at 623.

Contrary to DEP's exception, the ALJ's findings at issue in paragraph nos. 130, 140, 168 and 170 of the RO are supported by competent substantial evidence. (Missimer, T. Vol. 7, p. 966, lines 1-14).

Based on the foregoing reasons, DEP's exception to paragraph nos. 130, 140, 168 and 170 is denied.

DEP's Exception to Paragraph No. 146

DEP takes exception to paragraph no. 146 of the RO, which provides, in its entirety:

146. Pursuant to the foregoing Findings of Fact, it is determined, as a matter of ultimate fact, that the substantial, credible, and persuasive evidence does not demonstrate that fluid movement into a USDW, in violation of chapter 62-528 and incorporated federal regulations, has occurred at the Site necessitating the implementation of high-level disinfection at the Plant.

(RO¶146).

DEP "takes exception to this Finding of Fact on the basis that it fails to address whether the substantial, credible and persuasive evidence demonstrated that fluid movement into a USDW may occur." DEP's Exceptions, pp. 5-6.

DEP does not allege there is no competent substantial evidence to support paragraph no. 146 of the RO; instead, DEP contends that the ALJ failed to consider a factor that should have been included in this paragraph. However, an agency has no authority to make supplemental findings of fact to those contained in the RO. See, e.g., North Port, Fla., 645 So. 2d at 487; Fla. Power & Light Co., 693 So. 2d at 1026-1027.

Moreover, the ALJ did consider whether Broward County's underground injection wells "may" cause fluid movement. The ALJ concluded in paragraph no. 172 of the RO that DEP failed to sustain its burden to establish that the County's UIC wells have caused *or may cause* fluid movement into a USDW as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations. (RO ¶ 172).⁵

Based on the foregoing reasons, DEP's exception to paragraph no. 146 is denied.

⁵ See footnote 3 above, ruling on DEP's exception to paragraph no. 88 of the RO, which is incorporated by reference into this ruling.

DEP's Exception to Paragraph No. 147

DEP takes exception to paragraph no. 147 of the RO, which provides, in its entirety that "Accordingly, there is no factual basis for DEP to require the County to implement high-level disinfection at the Plant." (RO ¶ 147). DEP takes exception to this paragraph alleging that the ALJ failed to identify that "the rule authorizes HLD if the evidence establishes that fluid movement into a USDW may occur." DEP's Exceptions, p. 6.

DEP does not allege there is no competent substantial evidence to support paragraph no. 147 of the RO; instead, DEP contends that the ALJ failed to consider a factor that should have been included in this paragraph. However, an agency has no authority to make supplemental findings of fact to those contained in the RO. See, e.g., North Port, Fla., 645 So. 2d at 487; Fla. Power & Light Co., 693 So. 2d at 1026-1027.

Moreover, the ALJ did consider whether Broward County's underground injection wells "may" cause fluid movement. The ALJ concluded in paragraph no. 172 of the RO that DEP failed to sustain its burden to establish that the County's UIC wells have caused *or may cause* fluid movement into a USDW as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations. (RO ¶ 172).6

Based on the foregoing reasons, DEP's exception to paragraph no. 147 is denied.

DEP's Exception to Paragraph No. 160

DEP takes exception to paragraph no. 160 of the RO, which provides, in its entirety:

160. Based on the foregoing Findings of Fact, which are supported by competent, substantial, credible, and persuasive evidence presented at the final hearing, and pursuant to the applicable state rules and incorporated federal regulations, it is concluded that the County's injection wells have not caused or

⁶ See footnote 3 above, ruling on DEP's exception to paragraph no. 88 of the RO, which is incorporated by reference into this ruling.

allowed the movement of injection or formation fluids into underground sources of drinking water, as prohibited by rules 62-528.400(2)(c) and (d), and 40 C.F.R. sections 144.12 and 146.15, as alleged in the HLD Letter, such that the County must be required to implement high-level disinfection at the Plant.

(RO ¶ 160). DEP takes exception to this Conclusion of Law alleging "it ignores the portion of the rule that prohibits injection of treated wastewater that may cause fluid movement into a USDW." DEP's Exceptions, p. 6.

DEP disagrees with the ALJ's conclusion of law and the underlying facts upon which the conclusion of law is based. The ALJ concluded that "the County's injections wells have not caused or allowed the movement of injection or formation fluids into underground sources of drinking water . . . as alleged in the HLD Letter." (RO ¶ 160). However, the HLD Letter under challenge directed Broward County to provide high level disinfection to the injected domestic wastewater within 5 years of the HLD letter based on DEP's findings that Broward County's monitoring zones in the USDW "are subject to influence from the UIC wells and have been affected by vertical fluid migration of the plant's effluent and formation water." HLD letter issued by DEP July 8, 2020 and attached as Attachment II to Broward County's petition for an administrative hearing filed with DOAH on March 25, 2021, p. 1.

Moreover, the ALJ did consider whether Broward County's underground injection wells "may" cause fluid movement. The ALJ concluded in paragraph no. 172 of the RO that DEP failed to sustain its burden to establish that the County's UIC wells have caused *or may cause* fluid movement into a USDW as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations. (RO ¶ 172).

⁷ See footnote 3 above, ruling on DEP's exception to paragraph no. 88 of the RO, which is incorporated by reference into this ruling.

Lastly, paragraph no. 160 of the RO is consistent with the terms of the HLD letter issued by DEP on July 8, 2020; and thus, should not be rejected.

Based on the foregoing reasons, DEP's exception to paragraph no. 160 is denied.

CONCLUSION

Having considered the applicable law and standards of review in light of the findings and conclusions set forth in the Recommended Order, and being otherwise duly advised, it is

ORDERED that:

- A. The Recommended Order (Exhibit A) is adopted, except as modified by the above rulings on Exceptions, and incorporated by reference herein.
- B. DEP failed to demonstrate that Broward County's underground injection control wells, pursuant to Permit Nos. 334636-001-006-UO/1M and 334636-007-008-UC/1M, have caused or may cause fluid movement into an underground source of drinking water as prohibited by chapter 62-528, Florida Administrative Code, and the incorporated federal regulations.
- C. The Department rescinds the HLD letter dated July 8, 2020 that requires Broward County to implement high-level disinfection at its underground injection control wells subject to this Final Order.

JUDICIAL REVIEW

Any party to this proceeding has the right to seek judicial review of the Final Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the

appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Final Order is filed with the clerk of the Department.

DONE AND ORDERED this 7th day of June 2022, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SHAWN HAMILTON

Secretary

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

FILED ON THIS DATE PURSUANT TO § 120.52, FLORIDA STATUTES, WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED.

CLERK

June 7, 2022

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Final Order has been sent by

electronic mail to:

Michael Christopher Owens, Esquire
Matthew Haber, Esquire
Broward County Attorney's Office
Governmental Center
115 South Andrews Avenue, Suite 423
Fort Lauderdale, FL 33301
MOwens@broward.org
MHaber@broward.org

Marianna Sarkisyan, Esquire
Alexis Montiglio, Esquire
Staci Kichler, Esquire
Department of Environmental Protection
3900 Commonwealth Blvd., MS. 35
Tallahassee, FL 32399-3000
Marianna Sarkisyan (Florida DEP 100)

Marianna.Sarkisyan@FloridaDEP.gov Alexis.Montiglio@FloridaDEP.gov Staci.Kichler@FloridaDEP.gov. Anne.Willis@FloridaDEP.gov Lateshee.Daniels@FloridaDEP.gov

this 7th day of June 2022.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STACEY D.COWLEY

Administrative Law Counsel

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Tallahassee, FL 32399-3000

Email: Stacey.Cowley@FloridaDEP.gov

STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

BROWARD COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA.

Petitioner,	
vs.	Case No. 21-1139
DEPARTMENT OF ENVIRONMEN	TAL
PROTECTION,	

Respondent.

RECOMMENDED ORDER

Pursuant to notice, the final hearing in this proceeding was conducted pursuant to sections 120.569 and 120.57(1), Florida Statutes (2021), on October 7, 11 through 14, and 25; and November 2, 2021, by Zoom Conference before Administrative Law Judge ("ALJ") Cathy M. Sellers.

APPEARANCES

For Petitioner: Michael Christopher Owens, Esquire

Matthew S. Haber, Esquire

Broward County Attorney's Office 115 South Andrews Avenue, Suite 423

Fort Lauderdale, Florida 33301

For Respondent: Marianna Sarkisyan, Esquire

Staci Kichler, Esquire Alexis Montiglio, Esquire

Department of Environmental Protection Douglass Building, Mail Station 35 3900 Commonwealth Boulevard Tallahassee, Florida 32399

¹ All references to Florida Statutes are to the 2021 codification.

STATEMENT OF THE ISSUE

The issue to be determined is whether the underground injection, by Broward County, of treated domestic wastewater, pursuant to Permit Nos. 334636-001-006-UO/1M and 334636-007-008-UC/IM, has caused, or may cause, the movement of fluid into an underground source of drinking water in violation of Florida Administrative Code Chapter 62-528 and 40 C.F.R. §§ 144.12 and 146.15, such that Broward County should be required to meet the high-level disinfection requirement pursuant to 40 C.F.R. § 146.15.

PRELIMINARY STATEMENT

By letter dated July 8, 2020 (hereafter, "HLD Letter"), Respondent,
Department of Environmental Protection ("DEP"), notified Petitioner,
Broward County ("County"), that the underground injection of domestic
wastewater through its underground injection control wells (hereafter, "UIC
wells" or "injection wells"), as authorized by Permit Nos. 334636-001-006UO/1M and 334636-007-008-UC/IM, has caused, or may cause, the movement
of fluid into an underground source of drinking water ("USDW"), such that
the County is required to meet the high-level disinfection requirement in
40 C.F.R. § 146.15, in order to continue operating its UIC wells. The County
filed Broward County's Petition for Formal Administrative Hearing on
March 1, 2021, challenging DEP's determination that fluid movement has
occurred due to operation of the UIC wells such that high-level disinfection
must be implemented. On March 25, 2021, DEP referred this case to the
Division of Administrative Hearings ("DOAH") for assignment of an ALJ to
conduct an administrative hearing.

The final hearing originally was scheduled for September 13 through 17, 2021. On July 1, 2021, DEP filed the Department of Environmental Protection's Motion to Relinquish Jurisdiction or[,] in the Alternative, Motion in Limine ("DEP's Motion in Limine"). On July 12, 2021, the County filed

Broward County's Response in Opposition to Department of Environmental Protection's Motion to Relinquish Jurisdiction or[,] in the Alternative, Motion in Limine.

On July 20, 2021, ALJ Francine Ffolkes granted Broward County's Motion for Disqualification of Administrative Law Judge. On July 28, 2021, this case was transferred to the undersigned to conduct the final hearing and issue this Recommended Order.

On July 29, 2021, the undersigned issued an Order requesting the parties to provide dates for rescheduling the last day of the final hearing. In response, on August 12, 2021, the parties filed their Joint Response to Order Requesting Parties' Availability for Rescheduling Last Day of Hearing, requesting that the entire final hearing be continued and rescheduled. The final hearing was rescheduled for October 7 and 11 through 14, 2021.

On August 12, 2021, a hearing on DEP's Motion in Limine was held, and on August 16, 2021, the undersigned issued the Order Denying Motion to Relinquish Jurisdiction; Denying, in Part, Motion in Limine; and Establishing Dates for Filing Additional Response and Reply on Motion in Limine Issues. On August 30, 2021, the County filed Broward County's Supplemental Response in Opposition to Department of Environmental Protection's Motion in Limine. DEP filed Florida Department of Environmental Protection's Supplemental Argument in Support of Its Motion in Limine on September 10, 2021. On September 27, 2021, the County filed Broward County's Motion for Leave to File Amended Petition for Formal Administrative Hearing. On October 6, 2021, the County filed Broward County's Motion to Strike Respondent's Expert Witnesses and Reports, or in the Alternative, Motion in Limine to Limit Witness Testimony ("Motion to Strike DEP Witnesses").

On October 7, 2021, at the beginning of the final hearing, the undersigned ruled ore tenus on the remaining issues raised in DEP's Motion in Limine, granting DEP's request to exclude evidence regarding the cost of implementing high-level disinfection, on the basis that it was not a relevant consideration under the applicable Florida rules and federal regulations regarding whether high-level disinfection should be imposed. Additionally, the undersigned granted in part, and denied in part, Broward County's Motion for Leave to File Amended Petition for Formal Administrative Hearing, and denied the County's Motion to Strike DEP Witnesses. On October 11, 2021, the County filed Broward County's Motion for Consideration ("Motion for Reconsideration"), requesting the undersigned to reconsider her ruling on DEP's Motion in Limine; the undersigned denied the Motion for Reconsideration.

The final hearing was conducted as scheduled on October 7 and 11 through 14, 2021. However, the parties needed additional time to complete the hearing. Pursuant to the parties' Joint Notice of Availability, the last two days of the final hearing were scheduled for October 25 and November 2, 2021. The final hearing was conducted on October 25 and November 2, and concluded on November 2, 2021.

DEP presented the testimony of Cathleen McCarty and Cindy Fischler.

DEP Exhibit Nos. 1-297; 1-300; 1-303; 1-305; 1-307; 1-308; 1-311; 1-380

(pages 3690 through 3789 only); 1-381; 1-477; 1-478; 1-504; 1-510; 1-548; 1-566; 1-569; 1-587 (page 15730 only); 1-597; 1-1680; 3; 4; and 13 were admitted into evidence without objection, and DEP Exhibit Nos. 1-309; 1-1359; 1-1361 through 1-1669; 1-1657; 2; 13; and 15 (except for Figures 11 and 12) were admitted over objection.

The County presented the testimony of Dr. Thomas Missimer, Dr. Robert Maliva, Patrick Davis, and Alan Garcia. County Exhibit Nos. 1-2; 1-14; 1-17

through 1-19; 1-21; 1-22; 1-28; 1-14; 3-1; 3-5; 4-1; 5-1; and 5-12 were admitted into evidence without objection, and County Exhibit No. 4-3, pages 0027, 0030, and 0032, were admitted into evidence over objection.

At the conclusion of the final hearing, the parties agreed that, pursuant to section 90.104(1)(b), Florida Statutes, the County would file its offer of proof (i.e., "proffer"²) of evidence that was excluded within 15 days of the date the transcript of the final hearing was filed at DOAH, and the parties would file their proposed recommended orders 30 days after that date.

Volumes 1 through 4 of the 11-volume Transcript were filed at DOAH on October 18, 2021, and the remaining seven volumes of the Transcript were filed on November 15, 2021. Pursuant to the parties' agreement, the County filed its proffer of excluded evidence on December 1, 2021. Pursuant to the parties' agreement regarding extension of the deadline for filing proposed recommended orders, they initially were given until December 30, 2021, to file their proposed recommended orders. Thereafter, pursuant to the parties' Agreed[-]To Motion For Extension Of Time To File Proposed Recommended Orders filed on November 23, 2021, the parties were given until January 31, 2022, to file their proposed recommended orders. The parties timely filed their proposed recommended orders, both of which have been duly considered in preparing this Recommended Order.

FINDINGS OF FACT

The following Findings of Fact are based on the stipulations of the parties and the preponderance of the competent, substantial, credible, and persuasive evidence presented at the final hearing.

² Black's Dictionary (Deluxe 7th ed., 1999) defines "proffer" as "to offer or tender (something, esp. evidence) for immediate acceptance." Florida cases use the term "proffer" to refer to allowing a party to describe the excluded evidence for purposes of preserving the issue of exclusion of such evidence for appeal.

I. The Parties

- 1. Petitioner, the County, is a political subdivision of the State of Florida that operates a public water utility that is responsible for supplying drinking water and providing wastewater services for its residents. The County's Office is at 115 South Andrews Avenue, Fort Lauderdale, Florida 33301.
- 2. Respondent, DEP, is the agency of the State of Florida authorized to protect the state's air and water resources, and to administer the provisions of chapter 403, Florida Statutes, and implementing rules—pertinent here, Florida Administrative Code Chapter 62-528, governing underground injection control.

II. Description of the UIC Wells and Monitor Wells

- 3. The County is the owner and operator of the North Regional Wastewater Treatment Plant ("Plant"), a domestic wastewater treatment plant permitted and operated pursuant to Permit No. FL0031771-031-DW1P-NR ("Treatment Plant Permit"). The Plant is located at 2401 North Powerline Road, Pompano Beach, Florida ("Plant Site" or "Site").
- 4. The Treatment Plant Permit authorizes the County to dispose of secondary treated wastewater by underground injection through Countyowned and operated municipal injection wells, as well as by ocean outfall, and through a reuse program.
- 5. The UIC wells, which are consecutively numbered as IW-1 through IW-8, are located at the Plant Site. At this time, IW-1 through IW-6 are operating UIC wells, and IUC wells IW-7 and IW-8 are not operating.
- 6. In addition, five monitor wells are located at the Plant Site. Monitor wells MW-1, MW-2, MW-3, MW-5, and MW-6, which are dual-zone wells

having an upper monitoring zone ("UMZ") and a lower monitoring zone ("LMZ"), monitor ground water quality at the Plant Site.³

- 7. A key purpose of the monitor wells is to monitor the confinement of the injection zone from the overlying USDW and to determine whether injection activity has caused, or may cause, the movement of fluid adjacent to the wellbore of the UIC wells into a USDW.
- 8. Permit No. 334636-001-006-UO/1M, the most recent version of which was issued on October 5, 2015 (hereafter, "2015 UIC Permit"), authorizes the operation of UIC wells IW-1 through IW-6 and monitor wells MW-1, MW-2, MW-3, and MW-5. The County timely filed a renewal application for this permit; therefore, the 2015 UIC Permit remains in effect and is the current permit authorizing the operation of UIC wells IW-1 through IW-6 and MW-1, MW-2, MW-3, and MW-5.
- 9. The 2015 UIC Permit requires the County to, among other things, periodically monitor ground water quality in the first aquifer overlying the injection zone and periodically monitor ground water quality in the lowermost USDW.
- 10. Permit No. 334636-007-008-UC/IM, which was issued in 2017 ("2017 Permit"), authorizes the operational testing of UIC wells IW-7, IW-8, and monitor well MW-6. For reasons addressed below, IW-7 and IW-8 currently are not operating. IW-6 is an operating monitor well.
- 11. The six UIC wells at the Plant Site inject treated wastewater into a portion of the Lower Floridan Aquifer called the Boulder Zone, which contains non-potable water having a native fluid salinity concentration of approximately 35,000 milligrams per liter ("mg/L"). The upper boundary of

³ Rule 62-528,425(1)(g)4, requires the permittee to monitor a zone below the base of the USDW, if a zone is available. As discussed at length below, the LMZs of the monitor wells at the Site monitor a zone below the base of the USDW. This rule also requires the permittee to monitor at least one zone within, and near the base of, the USDW. Here, the UMZs of the monitor wells at the Site monitor a zone above the base of, and in, the USDW.

the injection zone is roughly 2,000 feet below land surface ("bls") under the Site.

- 12. MW-1 is located at the southwestern corner of the Plant Site, approximately 144 feet east of IW-1 and 156 feet west of IW-2. The UMZ for MW-1 is located at an interval of between 1,100 and 1,128 feet bls. The LMZ for MW-1 is located at an interval of between 1,590 and 1,620 feet bls.
- 13. MW-2 is located at the southern boundary of the Plant Site, approximately 156 feet east of IW-3 and 144 feet west of IW-4. The UMZ of MW-2 is located from 1,000 to 1,130 feet bls, and the LMZ of MW-2 is located from 1,600 to 1,630 feet bls.
- 14. MW-3 is located approximately halfway between the northern and southern boundaries of the Site, and slightly west of the center of the Site. It is approximately 70 feet north of IW-5. The UMZ of MW-3 is located from 1,380 to 1,426 feet bls, and the LMZ of MW-3 is located from 1,633 to 1,683 feet bls.
- 15. MW-5 was constructed to replace MW-4, which has been plugged and abandoned. MW-5 is located approximately 60 feet from the location of MW-4, and approximately 95 feet west of IW-6. The UMZ of MW-5 is located from 1,380 to 1,426 feet bls, and the LMZ of MW-5 is located from 1,633 to 1,683.
- 16. MW-6 is located 150 feet east of IW-7 and 150 feet west of IW-8. The UMZ for MW-6 is from 1,380 to 1,426 feet bls, and the LMZ for MW-6 is from 1,633 to 1,656 feet bls.
- 17. All of the UMZs and LMZs for each of the monitor wells at the Plant Site were proposed by the County based on extensive geologic analysis and water quality data, and have been approved by DEP and memorialized in the 2015 UIC Permit and the 2017 Permit.
- III. Relevant Regulatory History of the UIC and Monitor Wells
- 18. The County's injection wells are classified as Class I wells, pursuant to rule 62-528.300(1)(a).

- 19. In order to construct and operate the UIC wells and monitor wells, the County obtained construction and operation permits pursuant to chapter 62-528.
- 20. Pursuant to rule 62-528.425(1)(g)3., each UIC well must have an associated monitor well, which must be located within 150 feet of the UIC well unless there is an affirmative demonstration, through a hydrogeologic study, that a monitor well located at a greater distance from the UIC well is capable of adequately monitoring fluid movement adjacent to the borehole. All of the County's monitor wells are constructed within 150 feet of the injection well or wells that the specific monitor well will monitor. No evidence, consisting of a hydrogeologic study, was presented at the final hearing demonstrating, with respect to the County's UIC and monitor wells, that a monitor well located greater than 150 feet away from the injection well it will monitor will adequately monitor fluid movement from the injection well.
- 21. As DEP's witness McCarty explained, the purpose of the monitor wells is to "make sure that the injected fluid or the formation fluids are not migrating into [a USDW] because of the injection activity."
- 22. As part of the construction for each of the UIC and accompanying monitor wells, the County has submitted numerous reports, including well completion reports, containing extensive, detailed information and data regarding the site-specific geology and water quality. As discussed below, the information generated as part of the well construction and completion for each well was used to establish the depth ranges for the UMZs and LMZs for each of the monitor wells.
- 23. Additionally, upon the UIC wells and monitor wells becoming operational, the County has submitted, and continues to submit, numerous reports, including monthly monitoring reports and annual reports containing comprehensive water quality data, injection pressure, and other information regarding the operation of each of the wells.

- 24. The County submitted a construction permit application to construct UIC wells IW-1 through IW-4 and an accompanying monitor well in September 1988.
- 25. DEP initially proposed to deny the application for the construction permit, and informed the County that the project would be permittable if the County constructed two deep monitor wells to a depth of approximately 2,000 feet bls in order to provide reasonable assurance that there would not be a "leak at a wellbore into a [USDW]."⁴
- 26. In response, the County modified its application to include two monitor wells, MW-1 and MW-2, to be constructed to a depth of approximately 2,000 feet bls.
- 27. DEP issued the construction permit for IW-1 through IW-4 and MW-1 and MW-2 in June 1989. Under that permit, MW-1 was associated with IW-1 and IW-2, and MW-2 was associated with IW-3 and IW-4.
- 28. IW-1, IW-2, and MW-1 were constructed in 1990 and were approved for operational testing in January 1991.
- 29. The construction permit for the wells had an initial expiration date of January 1991. That expiration date was extended to January 1992, then subsequently extended to January 1993, to enable operational testing of the UIC wells to continue.
- 30. Operation Permit Nos. 0051336-001-UO, 0128242-001-UO, 0128244-001-UO, and 012845-001-UO, authorizing the operation of UIC wells IW-1 through IW-4 for the injection of treated wastewater, were issued in 1998.
- 31. Additionally, in 1998, the LMZ for MW-1 was modified to enable sampling at the shallower depths of 1,590 to 1,620 feet bls, and the LMZ for MW-2 was modified to enable sampling at the shallower depths of 1,600 to 1,630 feet bls.

⁴ DEP Exhibit 1-13, Bates pages 263-265.

- 32. Construction Permit Nos. 0051336-005-UC and 0051336-006-UC were issued in 1999 for injection well IW-5, monitor well MW-3, injection well IW-6, and monitor well MW-4.
 - 33. IW-5, IW-6, and MW-3 were authorized for operational testing in 2001.
- 34. Permit No. 0051336-448-UC, to authorize the continued operational testing of IW-5 and IW-6, was issued on May 22, 2003.
- 35. Operation Permit No. 0051336-439-UO was issued for UIC wells IW-5 and IW-6 and their associated monitor wells in February 2004. This operation permit was issued along with Administrative Order AO-03-010-UC-06-SED, which is discussed in greater detail below.
- 36. Construction Permit No. 0051336-935-UC, authorizing the construction of MW-5 to replace MW-4, was issued in July 2011. Construction of MW-5 was completed in July 2012, and, pursuant to authorization, MW-5 began operating in July 2012.
- 37. MW-4 was plugged and abandoned in July 2012, because, as further discussed below, it was determined by both DEP and the County to provide unreliable water quality monitoring data.
- 38. Operation Permit No. 0051336-502-UO was issued in July 2010, authorizing the continued operation of UIC wells IW-1 through IW-6.
- 39. The construction of UIC wells IW-7, IW-8, and MW-6 began in 2014 and were completed in 2016. As found above and further discussed below, MW-6 is operational, while IW-7 and IW-8 are not operational.
- 40. In October 2015, the operation permit for IW-1 through IW-6 and MW-1, MW-2, MW-3, and MW-5 was renewed as Operation Permit No. 0334636-001-006/UO/1M (which, as noted above, is also referred to as the 2015 UIC Permit).
- 41. As found above, the County timely filed a renewal application, to renew Operation Permit No. 0334636-001-006/UO/1M, which remains in effect and is the current permit authorizing the operation of UIC wells IW-1 through IW-6 and MW-1, MW-2, MW-3, and MW-5.

- 42. As discussed above, Permit No. 334636-007-008-UC/IM (referred to above as the "2017 Permit") authorizes the operation of MW-6.
- 43. Each time DEP issued or renewed these permits, it determined, as required by chapter 403 and chapter 62-528, that the County had provided reasonable assurance that no fluid movement into a USDW had occurred.
- 44. In addition to these permits for the construction and operation of UIC wells IW-1 through IW-6 and monitor wells MW-1 through MW-3, MW-5, and MW-6, two enforcement-related matters were fully resolved over the course of the regulatory history of the UIC and monitor wells at the Site.
- 45. Specifically, in April 1999, DEP and the County entered into a Consent Agreement to address issues associated with the construction of IW-3, which caused a freshening trend in MW-2 that subsequently was reversed following extensive pumping of MW-2 to expunge the borehole fluid resulting from the construction issues associated with IW-3. The County's full compliance with the requirements of the Consent Agreement completely resolved all issues associated with that matter.
- 46. Additionally, in February 2004, DEP issued Administrative Order AO-03-010-UC-06-SED ("AO") to investigate the cause of water quality changes observed from monitoring the UIC wells at the Site and to develop and implement remedial work as necessary. In January 2007, DEP issued an Amended Administrative Order Establishing Compliance Schedule Under Section 403.088(2)(f), F.S. ("Amended AO"), reiterating the purpose of the AO and further stating:

[DEP] and the [County] had acknowledged that the water quality data from MW-2 warranted investigation with regard to ascertaining the existence of potentially adverse data trends in the lower monitoring zone of MW-2. At that time, there were no definitive monitoring well water quality data trends, and Mechanical Integrity Testing results of the injection wells were satisfactory. However, [DEP] and the [County] had acknowledged that further study of MW-2 to

determine its integrity would be beneficial and that additional time would be needed to study the potential existence of trends.

The Amended AO extended the time for the County to complete the investigation. The competent substantial evidence establishes that the County fully complied with the requirements of the Amended AO and completed the investigation. As discussed below, the competent substantial evidence establishes that the results of additional water quality monitoring for MW-2 show no fluid movement as a result of injection activity at the Site.

IV. The HLD Letter

47. As stated above, on July 8, 2020, DEP sent the HLD Letter to the County, stating, in pertinent part:

The injection well construction information and ground water monitoring information reviewed by [DEP] demonstrate that the monitor zones in the [USDW] are subject to influence from the UIC wells and have been affected by the vertical fluid migration of the plant's effluent and formation water. Increases in salinity, total Kjeldahl nitrogen, and ammonia in both USDW and non-USDW monitor wells lead to this conclusion.

48. The HLD Letter was predicated on the following statement:

Both monitor zones associated with the UIC permits, 1,590 to 1,683 feet below land surface (bls; lower zone) and 1,380 to 1,435 feet bls (upper zone) are documented USDWs (ground water with less than 10,000 milligrams per liter (mg/L)) at the site, as evidenced by the background water quality and the data reported during injection.

49. As discussed herein, the competent, substantial, and persuasive evidence demonstrates that DEP's contention that the LMZs are within a USDW is factually and legally incorrect.

50. According to DEP's witness McCarty, the purpose of high-level disinfection is to "treat municipal effluent so as to reduce pathogens." The County tested water quality samples from MW-1, MW-2, and MW-5 for coliform bacteria, and determined that none were present in the monitored ground water beneath the Site.

V. Geology of the County's Site and Location of the USDW

- 51. The competent, substantial, credible, and persuasive evidence presented at the final hearing demonstrates and supports the following Findings of Fact.⁵
- 52. The Site is underlain by the Floridan Aquifer System, a geologic formation consisting of multiple units—relevant here, the Upper Floridan Aquifer, the Middle Confining Unit, and the Lower Floridan Aquifer.
- 53. The Upper Floridan Aquifer underlies a confining unit that separates the Biscayne Aquifer from the Floridan Aquifer System.
- 54. The base of the Upper Floridan Aquifer—which, as explained below, constitutes the USDW at the Site—is located at a depth of approximately 1,400 feet bls.
- 55. The Middle Confining Unit is located immediately below the base of the Upper Floridan Aquifer, from approximately 1,400 feet bls, down to a depth of approximately 2,000 feet bls.
- 56. The Middle Confining Unit separates the Upper Floridan Aquifer from the Lower Floridan Aquifer.
- 57. A "confining zone" is a geologic formation, group of formations, or part of a formation that is capable of limiting fluid movement from an injection zone. Fla. Admin. Code R. 62-528.200(6).
- 58. The Middle Confining Unit, which constitutes the "confining zone" at the Site, is the geologic formation that constitutes the confinement between

⁵ The undersigned found all contrary evidence presented at the final hearing to be incredible and unpersuasive.

the USDW—here, the Upper Floridan Aquifer—and the injection zone at the Site.

- 59. The competent substantial evidence, consisting of the credible and persuasive testimony of Maliva and Missimer, supported by their 1998 confinement analysis and other extensive experience at, and knowledge of, the Site,⁶ establishes that the Middle Confining Unit consists of approximately 600 vertical feet of multiple confining strata that provide adequate confinement to limit the upward movement of fluid from the injection zone. To this point, Missimer testified, credibly and persuasively, that "the Avon Park high permeability zone ... doesn't occur at this site."
- 60. The Lower Floridan Aquifer underlies the Middle Confining Unit. As noted above, the injection zone for the treated wastewater from the Plant is in the Boulder Zone, which is a highly transmissive portion of the Lower Floridan Aquifer. The injection zone for the UIC wells is comprised of an interval in the Boulder Zone from approximately 2,000 to 3,000 feet bls.
- 61. Rule 62-528.200(66) defines the USDW as "an 'aquifer' or its portion:

 (a) [w]hich supplies drinking water for human consumption, is classified by rule 62-520.410(1), F.A.C., as Class F-I, G-I or G-II ground water, or contains a total dissolved solids ["TDS"] concentration of less than 10,000 mg/L; and (b) [w]hich is not an "exempted aquifer."
- 62. The existence of an "aquifer" is a crucial element in determining whether a formation constitutes a USDW. "Aquifer" is defined, for purposes of chapter 62-528, as "a geological formation, group of formations or part of a formation that is capable of yielding a significant amount of water to a well or spring." Fla. Admin. Code R. 62-528.200(6)(emphasis added).
- 63. Here, the competent substantial evidence, consisting of the credible testimony by Maliva and Missimer, establishes that the Upper Floridan

⁶ Drs. Missimer and Maliva, both of whom are hydrogeologists, have numerous years of experience with, and precise and detailed knowledge of, the site-specific geology of the Plant Site. The testimony and supporting evidence that they presented at the final hearing in this proceeding constitutes competent substantial evidence that is both credible and persuasive.

Aquifer is the USDW at the Site. It is undisputed that the Upper Floridan Aquifer is capable of yielding a significant amount of water to a well or spring, so, by definition, is an "aquifer." Additionally, the ground water in the Upper Floridan Aquifer has a TDS concentration of less than 10,000 mg/L. Accordingly, the Upper Floridan Aquifer is a USDW.

64. The competent substantial evidence also establishes that the 10,000 mg/L TDS isopleth (which was informally referred to during the final hearing as the "10,000 mg/L TDS line") exists at various depths within the Middle Confining Unit, which is a "confining zone," and, therefore, by definition, is not an "aquifer."

65. The location of the 10,000 mg/L TDS isopleth is determined for each UIC well at the time the particular well is drilled.^{8,9} The competent substantial evidence establishes that the location of the 10,000 mg/L TDS isopleth actually constitutes an interval, or range, of depths, rather than one specific point, and that there is variability in the depth of the 10,000 mg/L TDS isopleth across the Plant Site.

66. Due to the inherent variability of these ranges, a single depth location for the 10,000 mg/L TDS isopleth cannot be accurately established across a

⁷ The definitions of "confining zone" and "aquifer" are mutually exclusive terms because, by definition, a confining zone limits the movement of fluid, while an "aquifer," by definition is a geologic formation that is capable—i.e., has sufficient transmissivity—to yield a significant amount of water to a well or spring. DEP's witness McCarty acknowledged and confirmed that a "confining zone" cannot constitute an "aquifer." T. volume 3, p. 272, lines 8-11.

⁸ See Fla. Admin. Code R. 62-528.405(1)(a), which requires an applicant for a Class I well construction permit to address, in the application for that well, the proposed testing and sampling procedures for accurately defining the depth at which total dissolved solids exceed 10,000 mg/L in formation waters.

⁹ To this point, the purpose of the 1998 confinement analysis performed by Missimer and Maliva for the Site was to determine the location of the bottom of the confining zone immediately above the injection zone. This was, in part, necessary, because MW-1 and MW-2 had been drilled to a depth of approximately 2,000 feet bls and, consequently, had entered the injection zone. Importantly, the purpose of the 1998 confinement analysis was not—as Fischler contended—performed to reevaluate the location of the base of the USDW.

given site. Thus, attempting to establish a single 10,000 mg/L TDS isopleth applicable to the Plant Site oversimplifies and misrepresents the geology specific to the Plant Site, and is not supported by the evidence in this proceeding.

67. The competent substantial evidence establishes that the 10,000 mg/L TDS isopleth for each monitor well at the Site is located within a confining zone—i.e., the Middle Confining Unit—rather within an "aquifer," as that term is defined in rule 62-528.200(6). Therefore, it is determined that the 10,000 mg/L TDS isopleth at the Site does not, and cannot, constitute the base of the USDW at the Site.

68. To this point, the term "base of the underground source of drinking water" is not defined in statute or in chapter 62-528. Importantly, nowhere in statute or rule is the "base of the underground source of drinking water" defined as the 10,000 mg/L TDS isopleth. Thus, to the extent DEP interprets the "base of the underground source of drinking water" as *always* being located at the 10,000 mg/L TDS isopleth for regulatory purposes 10—even if, as here, the 10,000 mg/L isopleth is not located in an "aquifer," as defined in rule 62-528.200(6)—DEP's "interpretation" is directly contrary to the plain language of the definition of "underground source of drinking water" in rule 62-528.200(66), which, by definition, is an "aquifer" that meets the characteristics specified in that definition.

69. Furthermore, under any circumstances, DEP's equating the base of the USDW with the 10,000 mg/L TDS isopleth *in this case* is directly contradicted by the credible and persuasive evidence regarding the geology *specific to this Site*, which establishes that the 10,000 mg/L TDS isopleth is located in the Middle Confining Unit, which, by definition, is not an "aquifer,"

¹⁰ See, for example, the testimony of McCarty, T., volume 2, p. 316, lines 3-12, and the testimony of Fischler, T., volume 11, p. 1399, lines 3 through 6. In fact, Fischler acknowledged that the rule does not *expressly* equate the base of the underground source of drinking water with the 10,000 mg/L TDS isopleth, but that this meaning is "implied."

and, therefore, does not, and cannot, constitute the base of the USDW at the Site.

- 70. Further to this point, DEP did not present any credible or persuasive evidence showing that the Middle Confining Unit does, or ever could, constitute a source of drinking water. To the contrary, the competent, substantial, and credible evidence establishes that because the Middle Confining Unit is a confining zone, it cannot produce water in sufficient quantity to constitute a USDW. Thus, to the extent DEP's witnesses contended that the Middle Confining Unit constitutes an "aquifer," for purposes of being within the USDW, that contention is rejected as unsupported by the credible evidence in this proceeding.
- 71. Specifically, in MW-1, the competent substantial evidence establishes that the 10,000 mg/L TDS isopleth is located at approximately 1,500 feet bls. The LMZ for MW-1 is located within the Middle Confining Unit, at depths from approximately 1,590 to 1,620 feet bls. Thus, the LMZ for MW-1 is located below the 10,000 mg/L TDS isopleth, and is not located in the USDW, the base of which has been established, by the competent substantial evidence, to be located at approximately 1,400 feet bls, at the bottom of the Upper Floridan Aquifer at the Site.
- 72. Likewise, in MW-2, the competent substantial evidence establishes that the 10,000 mg/L TDS isopleth is located at approximately 1,500 feet bls. The LMZ for MW-2 is located from 1,600 to 1,630 feet bls, which is in the Middle Confining Unit. Thus, the LMZ for MW-2 is located below the 10,000 mg/L TDS isopleth, and is not located in the USDW, which, as discussed above, is the Upper Floridan Aquifer, the bottom of which is located at approximately 1,400 feet bls.
- 73. In MW-3, the competent substantial evidence establishes that the 10,000 mg/L TDS isopleth is located at approximately 1,633 feet bls, and the LMZ for MW-3 is located within the Middle Confining Unit, from 1,633 to 1,683 feet bls. Thus, the LMZ for MW-3 straddles the 10,000 mg/L TDS

isopleth at the Site, and is located below the base of the Upper Floridan Aquifer, which constitutes the USDW at the Site.

74. In MW-5, the competent substantial evidence establishes that the 10,000 mg/L TDS isopleth is located at approximately 1,560 feet bls, and the LMZ for MW-5 is located within the Middle Confining Unit, from 1,633 to 1,683 feet bls. Thus, the LMZ for MW-5 is located below the base of the USDW, which, at the Site, constitutes the bottom of the Upper Floridan Aquifer, which is located at approximately 1,400 feet bls.

75. In MW-6, the competent substantial evidence establishes that the 10,000 mg/L TDS isopleth is located at approximately 1,500 feet bls. The LMZ for MW-6 is located within the Middle Confining Unit, from 1,634 to 1,656 feet bls. Thus, the LMZ for MW-6 is located below the base of the USDW, which, at the Site, constitutes the bottom of the Upper Floridan Aquifer, which is located at approximately 1,400 feet bls.

76. Of vital importance is that because all of the LMZs of the monitor wells at the Site are located in a confining zone, none of the monitor well LMZs are in an "aquifer," as defined in rule 62-528.200(6), and, therefore, are not within the USDW. Accordingly, the LMZs of the monitor wells cannot be used to determine whether fluid migration from injection of treated wastewater at the Site has moved into a USDW.

77. All of the UMZs for the monitor wells are in the Upper Floridan Aquifer, which is the USDW underlying the Plant Site. Therefore, based on the site-specific geologic conditions present in this case, the UMZs are the appropriate monitor zones for determining whether fluid has moved into a USDW at the Plant Site.

78. To this point, rule 62-528 does not expressly identify a "compliance point" for determining compliance with the prohibition on fluid movement into a USDW, and it does not expressly provide that in all cases, the UMZ is the "compliance point" for determining compliance with that prohibition. However, because, at the Plant Site, the LMZs for the monitor wells are all

located below the base of the Upper Floridan Aquifer, they cannot be used to determine whether fluid has moved into the USDW. Thus, in this particular case, the UMZs—all of which are located in the Upper Floridan Aquifer, which is the USDW at the Site—are the appropriate points for determining compliance, at the Plant Site, with the prohibition on fluid movement into a USDW.

- VI. Movement of Fluid and Dissolved Constituents in Geologic Formations
- 79. Missimer provided credible and persuasive testimony regarding the means by which the upward movement of wastewater and wastewater constituents may be retarded once it is injected into the underground injection zone.
- 80. The basic mechanism by which treated wastewater moves upward after being injected into an injection zone—here, the Boulder Zone—is based on the buoyancy of the wastewater.
- 81. Specifically, the TDS concentration in the Boulder Zone is at or slightly greater than 35,000 mg/L, near that of seawater. By contrast, the injected wastewater consists of much fresher water having a TDS concentration of approximately 500 to 1,000 mg/L TDS, and containing other constituents, including total Kjeldahl nitrogen ("TKN") and inorganic ammonia. Because the injected wastewater is fresher, and, therefore, less dense than the Boulder Zone formation fluid, it is buoyant, so floats upward. However, conditions may prevent treated wastewater from continuing to rise upward to reach a USDW.
- 82. The first condition relates to the buoyancy of the treated wastewater. As discussed above, injected wastewater is less dense than the formation fluid, so will float or rise in the formation after being injected. As the wastewater rises, it mixes with the more saline ground water into which it has been injected, and, thus, itself becomes more saline. Thus, the buoyancy of the injected wastewater decreases as it becomes more saline, and its rate of upward movement substantially declines. At some point, the wastewater

reaches the salinity of the formation fluid, so that there no longer is any density difference to drive the upward movement of the wastewater. At that point, the upward movement of the wastewater stops.

- 83. Additionally, as wastewater is injected, it rapidly disperses horizontally into the geologic formation comprising the injection zone because the injection zone formation has extremely high hydraulic conductivity. Significant buildup of fresh water at the point of injection would contribute to the pressure head differential, which would cause the injected water to move upward. This does not occur at the Site because the hydraulic conductivity of the Boulder Zone is so high that the injected wastewater rapidly disperses horizontally such that there is very little buildup of a fresh water head. Thus, there is no hydraulic pressure resulting from the injection that would cause the wastewater to move vertically in the formation.
- 84. The movement of constituents dissolved in wastewater also may be retarded by the geology of the formation or formations into which it moves. Specifically, larger molecules dissolved in wastewater may be filtered out of, or adsorbed by, the geologic characteristics of the formation into which the wastewater moves, such that these constituents are unable to move vertically through the formation to reach a USDW.
- 85. Additionally, the concentration of nutrients such as TKN and ammonia in wastewater may be diminished by naturally-occurring oxidation or reduction reactions or by being consumed by bacteria in ground water.
- 86. In sum, the upward movement of wastewater and/or its constituents may be reduced by one or more of these mechanisms, such that even if there were fluid movement upward in geologic strata overlying the injection zone, it is not—as Fischler contended—inevitable that wastewater and/or its constituents will reach a USDW.
- 87. Further to this point, DEP—which has the burden of proof in this proceeding—did not perform any solute transport modeling or analysis to support its assertion that fluid has moved into a USDW. Solute transport

analysis entails the placement of the specific water quality parameters sampled—here, TDS, TKN, and ammonia—into a model, which would determine whether there is a sufficient hydraulic gradient to allow these constituents to move into the USDW. This, too, renders Fischler's testimony and supporting evidence, which consisted, in part, of a basic trend analysis for TDS and TKN, 11 unpersuasive.

VII. Determination of Whether Fluid Has Moved into the USDW

- 88. The ultimate issue to be determined in this case is whether the preponderance of the competent substantial evidence establishes that the injection of treated wastewater through UIC wells IW-1 through IW-6 has caused fluid movement into a USDW.¹²
- 89. For the reasons discussed below, it is determined that the competent, substantial, credible, and persuasive evidence establishes that the injection of treated wastewater through UIC wells IW-1 through IW-6 has not caused prohibited fluid movement into a USDW at the Site such that high-level disinfection must be implemented at the Plant.

Analysis of Whether Fluid has Moved into a USDW

- 90. To support DEP's contention that fluid has moved into a USDW at the Site, Fischler performed a basic trend analysis of TDS and TKN, which consisted of plotting the monitoring data for each of these constituents on a graph and visually determining if there were trends in the data, which, Fischler contended would demonstrate the movement of fluid into a USDW.
- 91. As discussed above, DEP did not perform a solute transport analysis, which would take into account the movement of the different components of the wastewater through the strata at the Site.

¹¹ As a point of information, Fischler's graphs prepared for her trend analysis plotted data for TDS and TKN. She did not plot ammonia concentrations on her graphs.

¹² As discussed herein, DEP bears the burden of proof, by a preponderance of the competent substantial evidence, to demonstrate its position that fluid movement has occurred into a USDW at the Site.

- 92. Nor did DEP perform any type of multivariate statistical analysis that would determine trends and related changes in the concentration among and between the wastewater constituents.
- 93. In addition, Fischler hypothesized—without any basis other than her general knowledge of the geologic characteristics of the Boulder Zone and her view that "there is something a little bit different in the [northern] part of the site than in the other part of the site"—that there is a fracture in the strata at the Site which has enabled fluid to move into the USDW. Upon being questioned regarding a factual basis for her hypothesis, Fischler acknowledged that "I don't have any data to back that up[.]" DEP's other witness, McCarty, testified that "I have no indication that there is a fault at this site."
- 94. By contrast, Maliva—who has extensive knowledge of, and experience with, the site-specific geology of the Plant Site—credibly and persuasively testified that "there is no evidence for fractures that would allow for the vertical migration [of fluid] at the Site...."
- 95. As discussed above, the competent, substantial, credible, and persuasive evidence establishes that, pursuant to an analysis of the site-specific geology of the Plant Site performed by Maliva and Missimer, the base of the USDW is located at the base, or bottom, of the Upper Floridan Aquifer, at approximately 1,400 feet bls, and that there is adequate confinement, consisting of the approximately 600-feet thick Middle Confining Unit, to prevent fluid movement from the injection zone into the Upper Floridan Aquifer.
- 96. Additionally, as discussed above, the competent, substantial, credible, and persuasive evidence establishes that the 10,000 mg/L TDS isopleth at the Plant Site is located in the Middle Confining Unit—some distance from the base of the Upper Floridan Aquifer, which constitutes the base of the USDW at the Site. Therefore, based on the geology specific to the Site, the LMZs of the monitor wells cannot be used to determine whether, at

this Site, fluid has moved into a USDW. Rather, as discussed above, based on the site-specific geology and the depths of the monitoring zones for each monitor well at the Site, the UMZs are the appropriate points for determining whether fluid has moved into the USDW at the Site.

Monitor Wells MW-1, MW-2, and MW-3

97. As discussed above, when the construction permit for construction of UIC wells IW-1 through IW-4 and monitor wells MW-1, MW-2, and MW-3 was issued, the County complied with DEP's requirement to drill MW-1 and MW-2 down to a depth of approximately 2,000 feet bls, which intersected the injection zone.

98. As a result, the LMZ of MW-2 exhibited freshening, indicating that the fresher, more buoyant wastewater may be migrating vertically. The LMZs of MW-1 and MW-2 ultimately were relocated to shallower depths, and the freshening trend in the LMZ of MW-2 reversed after a period of a few years.

99. At the final hearing, DEP acknowledged that neither MW-1 nor MW-2 exhibited any constituent trends that would indicate movement of wastewater into the USDW.

100. For MW-3, there were slight changes in TDS and TKN levels in the LMZ, which Fischler characterized as "noise"; however, she acknowledged that over time, the constituent levels stabilized and did not indicate fluid movement into a USDW.

Monitor Well MW-4

101. At the final hearing, Fischler contended that water quality monitoring data from MW-4 constituted evidence of fluid movement into the USDW. However, that contention is not supported by the credible, persuasive evidence.

102. Davis, an environmental engineer who has extensive experience with the UIC wells and associated monitor wells at the Site since the late 1980s, testified regarding the history and purpose of MW-4. 103. Davis testified, credibly and persuasively, that after the LMZ for MW-2 showed evidence of wastewater influence, a DEP work group proposed that MW-4 should be constructed as a "science" well in order to evaluate the confinement at the site. As such, MW-4 was purposely drilled into a formation into which it was expected that wastewater would be found, in order to engage in extensive core sampling and straddle packer tests to determine the precise location of the injection horizon and whether there was adequate confinement above that horizon.¹³

104. MW-4 was drilled in two phases, the first phase to identify the depth of the injection zone more accurately and to assess adequacy of confinement, and the second phase to modify MW-4 for subsequent use as a monitor well.

105. The drilling of MW-4 was purposely performed slowly in order to determine the precise location of the injection horizon and the adequacy of confinement at the Site. ¹⁴ Thus, the drill hole was open for a long period of time.

106. Additionally, the well was drilled using the reverse air circulation construction method, which entails the recirculation of fluid in the uncased borehole. As a result, the credible evidence shows that a "slug" of wastewater from the injection zone—into which MW-4 was purposely drilled—moved into the LMZ of MW-4, leaving a residual slug of wastewater in the strata exposed to the wastewater during drilling, after the exploratory phase for MW-4 was completed.

107. After two years of study, the MW-4 was backplugged and perforated to create dual monitoring zones to monitor IW-6.

108. As a consequence of drilling into the injection zone, leaving the borehole open for a considerable period of time, and using the reverse air

¹³ Davis testified, credibly and persuasively, that MW-4 was not drilled to reevaluate the location of the USDW at the Site. As discussed above, the USDW is set for each specific well at the time that well is drilled, and it does not change.

¹⁴ The study determined the presence of adequate confinement above the injection horizon.

circulation construction method, increased levels of TKN and ammonia in the LMZ of MW-4 were observed once MW-4 began operation as a monitor well for IW-6.

- 109. After MW-4 went into operation, the DEP work group and the County collectively determined that the water quality data from MW-4 was unreliable and could not be accurately interpreted. Thus, DEP directed that MW-4 be plugged and abandoned.
- 110. MW-4 was plugged and abandoned in 2012. Thus, the most recent water quality data from MW-4—which DEP previously had determined and agreed was unreliable—was eight years old when DEP issued the HLD Letter.
- 111. Moreover, and importantly, the most recent data from MW-4 was approximately three years old when DEP issued the 2015 UIC Permit, authorizing the continued operation of UIC wells MW-1 through MW-6. DEP's issuance of the 2015 UIC Permit was specifically predicated on its determination, pursuant to chapter 62-528, that reasonable assurance had been provided that there was no fluid movement into a USDW at the Site. Had the water quality data from MW-4 constituted evidence of fluid movement into a USDW, DEP would not have issued the 2015 UIC Permit.
- 112. Finally, under any circumstances, the LMZ for MW-4 was located at an interval of 1,580 to 1,630 feet bls, which was in the Middle Confining Unit, over 1,000 feet below the base of the Upper Floridan Aquifer, which is the USDW at the Site. Thus, for the reasons discussed above, the water quality monitoring data for the LMZ of MW-4 cannot be interpreted as indicating fluid movement into the USDW at the Site.
- 113. In sum, there is no factual or scientifically-based reason for using the water quality monitoring data from MW-4 to determine whether there is fluid movement into a USDW at the Site.

Monitor Well MW-5

114. MW-5 was constructed to replace MW-4 because the LMZ of MW-4 was no longer a reliable source of data. 15

115. At the final hearing, Fischler testified that the water quality data from MW-5 did not indicate fluid movement into the UMZ, which is located at an interval between 1,380 to 1,426 feet bls, at the base of the USDW and partially in the upper portion of the Middle Confining Unit. Specifically, she characterized the TDS concentration over time in the UMZ of MW-5 as "fairly stable" and "indicative of background."

116. According to Fischler, the water quality monitoring data for the LMZ of MW-5 shows fluid movement into a USDW. However, her contention is not supported by the credible and persuasive evidence.

117. The water quality data for the LMZ of MW-5 does not fit the model of vertical fluid movement into a USDW under the principles of solute transport. 16

118. Specifically, although the TKN and ammonia levels are higher than background formation levels, there is no substantial freshening, which generally precedes changes to these nutrient levels when there is wastewater movement into a USDW.

119. Moreover, the water quality data from the MW-5 LMZ does not show an actual trend. As Davis explained, credibly and persuasively, linear regression analysis of the LMZ water quality data for MW-5—which was not performed by DEP—shows that the TKN and ammonia levels climbed for a period of time, then decreased for a period of time, and that it is likely that these levels will stabilize in the not-too-distant future. Thus, rather than evidencing fluid movement, the data demonstrate variability that is

¹⁵ Permit No. 0051336-935, issued July 13, 2011 (DEP Exhibit 1-507, Bates page DEP10016).

¹⁶ As noted above, DEP did not perform solute transport modeling in making its determination that the LMZ of MW-5 shows evidence of fluid movement into a USDW.

characteristic of the early stages of operation of a monitor well, and which may take an appreciable amount of time to stabilize.

most credibly explained by the existence of the slug of wastewater that entered the strata in the LMZ of MW-5 as a result of construction of MW-4, which, as discussed above, was purposely drilled into the injection zone at DEP's direction to investigate issues that arose from the County originally being required to drill MW-1 and MW-2 to 2,000 feet bls. As Missimer credibly explained, the nutrients are "left over from the slug that was released during the construction of [MW]-4," which was only 65 feet away from the location of MW-5. Missimer further explained, credibly, that the nutrients in the LMZ of MW-5 may take a relatively long time to subside and stabilize because they would not be diluted for a long time period. 17 Further to this point, Missimer testified, credibly, that the nutrient levels in the LMZ of MW-5 already have begun to stabilize and that, similar to the nutrient levels sampled in the LMZs of MW-1, MW-2, and MW-3, they will reach a steady state.

121. In any event, as discussed above, the competent substantial evidence establishes that 10,000 mg/L TDS isopleth is located at a depth of approximately 1,633 to 1,683 feet bls, which is in the Middle Confining Unit and over 200 feet below the base of the Upper Floridan Aquifer, which is the USDW at the Site. Therefore, the water quality data from the LMZ of MW-5 cannot, as a matter of fact, constitute evidence that there has been fluid movement into the USDW at the Site.

122. For these reasons, it is determined that the competent substantial evidence regarding the water quality data from the LMZ of MW-5 does not demonstrate that fluid has moved into a USDW.

¹⁷ The LMZ of MW-5 is in a confining zone, which, by definition, limits the flow of fluid—here, water.

Monitor Well MW-6

123. MW-6 was constructed as a monitor well associated with IW-7 and IW-8, for the purpose of monitoring the injection activity of IW-7 and IW-8. ¹⁸ Consistent with rule 62-528.425(1)(g)3., MW-6 is located approximately 150 feet away from IW-7 and the same distance away from IW-8. ¹⁹

124. As stated above, MW-6 is in operation. IW-7 and IW-8 have been constructed but are not in operation, and, to date, never have been used for the injection of wastewater.

125. DEP contends that the water quality data from both the UMZ and LMZ of MW-6 evidence fluid movement into the USDW.

126. The water quality data from both monitor zones of MW-6 exhibit elevated levels of TKN and ammonia, indicating the presence of these wastewater constituents.

127. However, the credible and persuasive evidence establishes that the elevated levels of TKN and ammonia observed in the water quality data from both monitoring zones of MW-6 are very likely due to drilling-related matters that arose during construction of IW-7 and IW-8, rather than from fluid movement into a USDW caused by the injection of wastewater. This is particularly likely, given that IW-7 and IW-8 have never operated to inject wastewater.

128. Due to difficulties that the well driller experienced in progressing the drill bit as IW-7 and IW-8 were drilled, it took a long time to complete the construction of these two injection wells. As a result, IW-7 and IW-8 had

¹⁸ Permit No. 0051336-349-UC, issued December 6, 2011 (DEP Exhibit 1-510, Bates page 10163).

¹⁹ As further discussed below, this rule requires monitor wells that are used to determine the absence of fluid movement adjacent to the wellbore of an injection well to be located within 150 feet of the injection well, unless certain other analyses—none of which were performed in this case—demonstrate that a monitor well located at a greater distance will be capable of adequately monitoring fluid movement adjacent to the borehole.

open—i.e., uncased—boreholes for an extended period of time. To this point, IW-7 had an open borehole for approximately 125 days.

- 129. During the lengthy period in which the UIC well boreholes were open, fluid from the reverse air circulation construction method—which was approved by DEP as the method to construct the wells—was recirculated in the well boreholes. This fluid contained elevated levels of TKN and ammonia due to the wells having been drilled—again, with DEP approval—to the depth of the injection horizon. As the fluid was recirculated over the lengthy construction period, the TKN and ammonia were able to invade the transmissive strata of the monitoring zones.
- 130. Importantly, as Missimer explained, well construction does not constitute "injection" of wastewater, and that to the extent fluid movement occurs during well construction, such movement is temporary only, and does not constitute permanent fluid movement into a USDW.
- 131. Thus, to the extent wastewater constituents are present in the UMZ and LMZ of MW-6, the credible and persuasive evidence establishes that their presence resulted from temporary well construction activities, rather than from the injection of wastewater at the Site.
- 132. Packer test water quality sampling for IW-7, IW-8, and MW-6 prior to the wells being cased bear out that the presence of elevated levels of TKN and ammonia observed in MW-6 is due to the temporary exposure of the strata monitored by MW-6 to fluid that was circulated during the construction of IW-7 and IW-8. This is because in the strata above the injection zone, but below the monitoring zones, the packer test results show no elevated levels of TKN or ammonia. If the packer test results were evidence of vertical fluid movement due to injection at the Site, elevated levels of TKN and ammonia would occur at every depth throughout the borehole.
- 133. As Maliva explained, credibly and persuasively, the packer test results are inconsistent with the vertical movement of fluid as a result of

injection activity at the Site because "[i]f you had vertical migration, you would expect to see wastewater present in all the intervals." Missimer corroborated Maliva's explanation, credibly testifying that "if there was an issue of upward migration, there would be wastewater in virtually all of those packer zones between the lower and upper monitoring [zones]."

- 134. Furthermore, as noted above, IW-7 and IW-8 have never operated to inject wastewater underground at the Site. Thus, no pressure head has existed to push the injected wastewater upward at this part of the Site.
- 135. As discussed above, Fischler hypothesized that a fracture in the formations underlying the Site have caused fluid to migrate into the monitoring zones of MW-6. However, as noted above, she acknowledged that she had no site-specific data to support this hypothesis.
- 136. By contrast, Missimer, who has extensive, multi-year knowledge of the geology underlying the Site, credibly testified that if there were a fracture zone at the Site, it would have existed for millions of years and would have caused upward movement of saline fluid before the UIC wells were drilled at the Site, such that high salinity levels would have existed at very shallow depths in the geologic section at the Site. These conditions would have been detected during the construction of the wells at the Site; yet no such conditions have been detected at any location on the Site in the 30-plus years of geologic investigation and well construction and monitoring at the Site.
- 137. Thus, Fischler's hypothesis regarding the existence of a fracture at the Site that has caused fluid movement from injection activities at the Site into MW-6 is unsupported by the competent, substantial, and credible evidence, and, in fact, is contradicted by the credible evidence regarding the geology specific to the Site. Accordingly, Fischler's contention that there is a fault at the Site that has resulted in fluid movement into a USDW is deemed incredible and unpersuasive.
- 138. In this vein, Fischler's testimony that water quality monitoring data from MW-6 can be used to determine fluid movement into a USDW from the

operation of UIC wells IW-1 through IW-6, which are located at other parts of the Site, also was unpersuasive. First, as discussed above, the credible and persuasive evidence demonstrates that fluid movement into a USDW as a result of the operation of UIC wells IW-1 through IW-6 has not occurred. Further, to the extent such fluid movement were to have occurred—and, as discussed above, the credible, persuasive evidence demonstrates that it has not occurred—the competent substantial evidence does not demonstrate the existence of a conduit or inadequate confinement at the Site that would enable fluid movement at other parts of the Site to be adequately or accurately monitored by MW-6. Additionally, as Missimer credibly explained, a monitor well must be located within 150 feet of the injection well (or wells) which the monitor well will monitor, because as the distance between the monitor well and injection well (or wells) increases, the monitor well is not capable of adequately monitoring fluid movement adjacent to the borehole of the injection well(s) it will monitor. As discussed above, no hydrogeologic study was performed by the County (or by DEP) demonstrating that a monitor well placed at a greater distance can adequately monitor fluid movement from UIC wells more than 150 feet away. Thus, Fischler's testimony regarding MW-6 water quality data being indicative of fluid movement into a USDW at other parts of the Site is both inconsistent with rule 62 528.425(1)(g)3, and unsupported by the credible and persuasive evidence.

139. DEP also posited that, even if the fluid movement into the monitor zones at MW-6 was not caused by the injection of wastewater but instead was related to the construction of IW-7 and IW-8, chapter 62-528 and 40 C.F.R. §§ 144.12(a) and 146.15 nonetheless have been violated, so that high-level disinfection must be implemented at the Plant.

140. The undersigned rejects this position as contrary to the competent, substantial, and credible evidence in this proceeding. Here, the *construction* permits issued by DEP for the UIC and monitor wells, including IW-7 and

IW-8, authorized the use of the reverse air circulation well-drilling method to construct IW-7 and IW-8. Thus, the construction activity, which resulted in the temporary movement of some wastewater constituents into transmissive strata, as evidenced in MW-6, was authorized by DEP, and, therefore, cannot, as a matter of fact, constitute a violation of DEP rules and incorporated federal regulations warranting the implementation of high-level disinfection.

141. More to this point, DEP—which bears the burden of proof in this proceeding—did not present any evidence whatsoever showing that the County engaged in any unauthorized or prohibited activity in constructing IW-7 and IW-8.

142. Nor did DEP present any evidence whatsoever showing that any of the UIC or monitor wells, including IW-7 and IW-8, were improperly constructed. In fact, both of DEP's witnesses acknowledged that they had no evidence indicating that any of the UIC wells at the Site were improperly constructed.

143. The competent, substantial, credible, and persuasive evidence establishes that the County's agent who drilled the wells did not engage in any activity that was not authorized under the permits for IW-7 and IW-8, and the competent, substantial, credible and persuasive evidence establishes that the wells were properly constructed using the authorized reverse air circulation method.²⁰

144. As the County's witness, Davis, explained, the reverse air circulation method of construction necessarily involves the recirculation of fluids through the well borehole, and that during such recirculation, the strata exposed in the borehole necessarily are exposed to constituents that are part of, or picked up in, the fluid that is being recirculated during construction. As Davis explained, reading the prohibition on fluid movement to absolutely prohibit the movement of any constituents during the reverse air circulation

²⁰ The HLD Letter provides that fluid movement due to the *improper* construction of wells is prohibited for purposes of requiring the implementation of high-level disinfection.

process would effectively eliminate the ability to drill a well. Thus, DEP's contention, in this case, that the prohibition on fluid movement in chapter 62-528 and 40 C.F.R §§ 144.12 and 146.15 extends to fluid movement—which is an inherent and approved part of the reverse air circulation method—during construction is unsupported by credible and persuasive evidence, and is unreasonable.

145. For these reasons, it is determined that the competent, substantial, credible, and persuasive evidence regarding MW-6 does not demonstrate fluid movement into an underground source of drinking water prohibited by chapter 62-528 and the incorporated federal regulations such that high-level disinfection must be implemented at the Plant.

VIII. Findings of Ultimate Fact

- 146. Pursuant to the foregoing Findings of Fact, it is determined, as a matter of ultimate fact, that the substantial, credible, and persuasive evidence does not demonstrate that fluid movement into a USDW, in violation of chapter 62-528 and incorporated federal regulations, has occurred at the Site necessitating the implementation of high-level disinfection at the Plant.
- 147. Accordingly, there is no factual basis for DEP to require the County to implement high-level disinfection at the Plant.

CONCLUSIONS OF LAW

- 148. DOAH has jurisdiction over the subject matter of, and parties to, this proceeding, pursuant to sections 120.569 and 120.57(1).
- 149. This is a de novo proceeding under section 120.57(1), intended to formulate agency action, rather than to review action taken earlier and preliminarily. § 120.57(1)(k), Fla. Stat; Dep't of Transp. v. J.W.C. Co., 396 So. 2d 778, 785 (Fla. 1st DCA 1981)(quoting McDonald v. Dep't of Banking & Fin., 346 So. 2d 569, 584 (Fla. 1st DCA 1977).

150. The ALJ's role in de novo proceedings under section 120.57(1) is to consider all evidence presented, resolve conflicts, judge the credibility of the witnesses, draw permissible inferences from the evidence presented at the hearing, and reach ultimate determinations of fact based on competent substantial evidence. Heifetz v. Dep't of Bus. Regul., Div. of Alcoholic Beverages and Tobacco, 475 So. 2d. 1277, 1281 (Fla. 1st DCA 1985).

151. In this case, DEP is asserting the affirmative of the issue—i.e., that the County's injection of treated domestic wastewater has caused, or may cause, fluid movement into a USDW in violation of chapter 62-528 and incorporated federal regulations, such that the County is required to implement high-level disinfection in order to continue operating its UIC wells. Accordingly, DEP bears the ultimate burden of proof in this proceeding. Balino v. Dep't of Health and Rehab. Servs., 348 So. 2d 349, 350 (Fla. 1st DCA 1977).

152. The standard of proof applicable to this proceeding is a preponderance of the evidence. § 120.57(1)(j), Fla. Stat.

A. Applicable State Rules and Federal Regulations

- 153. DEP regulates underground injection wells in Florida pursuant to chapter 62-528.
- 154. Rule 62-528.200 defines the following terms, which are pertinent to this proceeding:
 - (6) "Aquifer" means a geologic formation, group of formations[,] or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(15) "Confining zone" means geologic formation, group of formations, or part of a formation that is capable of limiting fluid movement from an injection zone.

(45) "Municipal injection well" means an injection well, publicly or privately owned, which is used to inject only fluids that have passed through the head of a permitted domestic wastewater treatment facility and received at least secondary treatment pursuant to Rule 62-600.420, F.A.C.

* * *

- (66) "Underground source of drinking water" means an "aquifer" or its portion:
- (a) Which supplies drinking water for human consumption, is classified by subsection 62-520.410(1), F.A.C., as a Class F-I, G-I, or G-II ground water, or contains a total dissolved solids concentration of less than 10,000 mg/L[.]

* * *

- 155. Class I wells are defined in rule 62-528.300(1)(a) to include municipal disposal wells which inject fluids beneath the lowermost formation containing, within one-quarter mile of the well bore, a USDW. As found above, the County's injection wells are Class I wells.
- 156. Rule 62-528.300(2), titled "Identification of Underground Sources of Drinking Water," states, in pertinent part:

The Department will identify by narrative description, illustrations, maps, and other means and shall protect, except where exempted under subsection 62-528.300(3), F.A.C., as an underground source of drinking water, all aquifers or parts of aquifers which meet the definition of an "underground source of drinking water" in subsection 62-528.200(66), F.A.C. Even if an aquifer has not been specifically identified by the Department, it is an underground source of drinking water if it meets the definition in subsection 62-528.200(66), F.A.C., and the criteria in subsection 62-520.410(1), F.A.C.

157. Rule 62-528.440(2), which establishes the general prohibitions applicable to underground injection activities, states, in pertinent part:

General Prohibitions.

* * *

- (c) Except as provided in 40 C.F.R. 146.15 and 146.16, as noticed in the Federal Register, Vol. 70, No. 224, November 22, 2005, pp. 70513 70532, hereby adopted and incorporated by reference, no underground injection activity shall be authorized where a Class I or III well causes or allows movement of fluid into underground sources of drinking water, if such fluid movement may cause a violation of any primary drinking water standard under 40 C.F.R. pt. 141 (1994), or may otherwise adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.
- (d) Except as provided in 40 C.F.R. 146.15 and 146.16, as noticed in the Federal Register, Vol. 70, No. 224, November 22, 2005, pp. 70513 - 70532, for Class I and III wells, if any water quality monitoring of an underground source of drinking water indicates the movement of injection or formation fluids into underground sources of drinking water, the Department shall prescribe such additional requirements for construction, corrective action (including closure of the injection well), operation, monitoring, or reporting as are necessary to prevent such movement. These additional requirements shall be imposed by modifying the permit, or the permit shall be terminated if cause exists, appropriate enforcement action shall be taken if the permit has been violated.

158. 40 C.F.R. § 144.12, titled "Prohibition of movement of fluid into underground sources of drinking water," states, in pertinent part:

- (a) No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.
- (b) For Class I ... wells, if any water quality monitoring of an underground source of drinking water indicates the movement of any contaminant into the underground source of drinking water, except as authorized under part 146, the Director shall prescribe such additional requirements for construction, corrective action, operation, monitoring, or reporting (including closure of the injection well) as are necessary to prevent such movement. In the case of wells authorized by permit, these additional requirements shall be imposed by modifying the permit in accordance with § 144.39, or the permit may be terminated under § 144.40 if cause exists, or appropriate enforcement action may be taken if the permit has been violated.

159. 40 C.F.R. § 146.15, titled "Class I municipal disposal well alternative authorization in certain parts of Florida," states, in pertinent part:

(a) Existing Class I municipal disposal wells in specific geographic regions as defined in paragraph (f) of this section may continue to inject without violating the regulatory prohibitions in Parts 144 and 146 of this chapter against the movement of injection or formation fluids into a USDW, provided that such wells meet the requirements of this section, even if the Director determines they have caused or may cause fluid movement into a USDW.

- (b) For purposes of this section, an existing Class I municipal disposal well is defined as a well for which a complete UIC construction permit application was received by the Director on or before December 22, 2005.
- (c) For purposes of this section, the determination that a Class I municipal disposal well has caused or may cause movement of injection or formation fluids into a USDW may be made by the Director based on any relevant data available to him/her, including ground water monitoring data generated pursuant to regulatory requirements governing operation of Class I municipal disposal wells.
- (d) In order for a Class I municipal disposal well to qualify for authorization to inject pursuant to paragraph (a) of this section, the Owner/Operator of that well shall:
- (1) Develop and implement a pretreatment program that is no less stringent than the requirements of Chapter 62–625, Florida Administrative Code, or have no significant industrial users as defined in that chapter.
- (2) Treat the injectate using secondary treatment in a manner that is no less stringent than the requirements of Florida Rule 62–600.420(1)(d), and using high-level disinfection in a manner that is no less stringent than the requirements of Florida Rule 62–600.440(5)(a)-(f), within five years after notification by the Director that the well has caused or may cause fluid movement into a USDW.

* * *

(f) Authorization to inject wastewater into existing Class I municipal disposal wells pursuant to this section is limited to Class I municipal disposal wells in Florida in the following counties: Brevard, Broward, Charlotte, Collier, Flagler, Glades, Hendry, Highlands, Hillsborough, Indian River, Lee, Manatee, Martin, Miami-Dade, Monroe,

Okeechobee, Orange, Osceola, Palm Beach, Pinellas, St. Johns, St. Lucie, Sarasota, and Volusia.

B. Fluid Movement has not Occurred Warranting High-level Disinfection

160. Based on the foregoing Findings of Fact, which are supported by the competent, substantial, credible, and persuasive evidence presented at the final hearing, and pursuant to the applicable state rules and incorporated federal regulations, it is concluded that the County's injection wells have not caused or allowed the movement of injection or formation fluids into underground sources of drinking water, as prohibited by rules 62-528.400(2)(c) and (d), and 40 C.F.R. sections 144.12 and 146.15, as alleged in the HLD Letter, such that the County must be required to implement high-level disinfection at the Plant.

- C. <u>DEP Incorrectly Interpreted and/or Applied its Own Rules in this Case</u>

 <u>Definitions of "Underground Source of Drinking Water" and "Base of the Underground Source of Drinking Water"</u>
- 161. As discussed above, the term "base of the underground source of drinking water" is not defined in statute or in chapter 62-528, and nowhere in statute or rule is the term "base of the underground source of drinking water" defined as the 10,000 mg/L TDS isopleth. Thus, to the extent DEP interprets the "base of the underground source of drinking water" as equating to, or always being located at, the 10,000 mg/L TDS isopleth for regulatory purposes—even if the 10,000 mg/L TDS isopleth is not located in an "aquifer," as defined in rule 62-528.200(6)—DEP's "interpretation" ignores that "aquifer" is a required element of the definition of "underground source of drinking water," as defined in rule 62-528.200(66), and, thus, is directly contrary to the plain language of that definition.
- 162. An agency must follow its own rules and is not authorized to ignore provisions that are in the rule, or add provisions that are not in the rule. See Cleveland Clinic Fla. Hosp. v. Ag. for Health Care Admin., 679 So. 2d 1237,

1242 (Fla. 1st DCA 1996)("[w]ithout question, an agency must follow its own rules."); Decarion v. Martinez, 537 So. 2d 1083, 1084 (Fla. 1st DCA 1989)(an agency is not authorized to deviate from the plain language of its own rule in determining a party's substantial interest). Where an agency's construction of its rule in inconsistent with the clear language of the rule, that construction must be rejected. Atlantis at Perdido Ass'n, Inc. v. Warner, 932 So. 2d 1206, 1212 (Fla. 1st DCA 2006); Fla. Dep't of Child. & Fam. Serv. v. McKim, 869 So. 2d 760, 762 (Fla. 1st DCA 2004). Accordingly, DEP's interpretation of the term "base of the underground source of drinking water" as equating to the 10,000 mg/L TDS isopleth is contrary to the plain language of its own rules, and, therefore, is rejected.

163. Furthermore, in this case, the competent, substantial, credible, and persuasive evidence demonstrates that the 10,000 mg/L TDS isopleth is located in the Middle Confining Unit, which is not an aquifer. Thus, the facts specific to this case render DEP's equation of the term "base of the underground source of drinking water" with the 10,000 mg/L TDS isopleth at the Site arbitrary, as not supported by the necessary facts, and capricious, as being unreasonable. See Dravo Basic Materials Co., Inc. v. State, Dep't of Transp., 602 So. 2d 632, 634 (Fla. 2d DCA 1992)(discussing the definitions of "arbitrary" and "capricious").

164. Additionally, nowhere in the plain language of any provision of chapter 62-528 is the term "base of the USDW" expressly and uniformly equated to the 10,000 mg/L TDS isopleth. Thus, DEP's interpretation of the term "base of the underground source of drinking water" as equating to, or always being located at, the 10,000 mg/L TDS isopleth constitutes an interpretation of that term that is not readily apparent from the plain language of chapter 403, Florida Statutes, or any provision in chapter 62-528, and, thus, itself constitutes an unadopted rule, which, pursuant to section 120.57(1)(e)1., cannot form the basis of agency action that determines a

party's substantial interests. See Grabba-Leaf, LLC v. Dep't of Bus. & Pro. Regul., 257 So. 3d 1205, 1210-11 (Fla. 1st DCA 2018).²¹

DEP's Interpretation of the Term "Construction" is Incorrect in this Case
165. Neither rule 62-528.200 nor 40 C.F.R. § 144.3, which define terms
applicable to the underground injection control regulatory program, define
the term "construction."

166. As discussed above, at the final hearing, DEP took the position that any fluid movement, even if caused by construction rather than by the injection of wastewater, is prohibited by 40 C.F.R. § 144.12(a) such that high-level disinfection must be implemented at the Plant.

167. As discussed above, the undersigned rejects this position as contrary to the competent, substantial, and credible evidence in this proceeding. To reiterate, the competent substantial evidence shows that DEP authorized the use of the reverse air circulation method to construct the wells, and DEP presented no evidence showing that the wells were constructed using unauthorized methods, or that they were improperly constructed.

168. Furthermore, as discussed above, the testimony of the County's expert witness, Davis, makes clear that DEP's interpretation of the term "construction" to strictly prohibit *any* fluid movement—even temporary fluid movement resulting from authorized and properly-conducted well construction methods—would effectively prohibit well drilling, and, thus, is unreasonable.

169. Statutes—and, by extension, their implementing rules—should be given a reasonable interpretation, and no literal interpretation should be given which leads to an unreasonable result. Johnson v. Presbyterian Homes

²¹ Although *Grabba-Leaf* involved the agency's interpretation of a statute, the same principle applies when, as here, the evidence here shows that an agency *uniformly* ascribes a meaning to a rule that is not readily apparent from the rule's plain language. This circumstance distinguishes DEP's position in this case from *Environmental Trust v. State, Department of Environmental Protection*, 714 So. 2d 493 (Fla. 1st DCA 1998), which involved a clarification of how an existing rule would be applied *in a particular case*, and which did not modify the existing rule requirements or provisions.

of the Synod of Fla., 239 So. 2d 256, 263 (Fla. 1970). Where an agency's interpretation of its rules is unreasonable, illogical, or leads to absurd results, that interpretation should not stand. See Fla. Dep't of High. Saf. and Motor Vehicles v. Hernandez, 74 So. 3d 1070, 1079 (Fla. 2011)(a basic tenet of construction compels an interpretation that would avoid an absurd result); Creative Choice XXV, Ltd. v. Fla. Hous. Fin. Corp., 991 So. 2d 899, 901 (Fla. 1st DCA 2008)(if an agency's interpretation of the law conflicts with the intent of the law, that interpretation should be rejected); Agrico Chem. Co. v. State Dep't of Env't Regul., 365 So. 2d 759, 766 (Fla. 1st DCA 1978), superseded by statute on other grounds, ch. 96-159 Fla. Laws, § 16 (agency's interpretation of its delegated authority should be exercised in a manner that avoids an unreasonable result).

170. For the reasons discussed above, DEP's interpretation of the term "construction" would lead to the unreasonable and absurd result that a permittee who obtains the necessary permits, and properly constructs wells pursuant to an approved method of well drilling authorized in those permits, nonetheless will be required to implement high-level disinfection as a result of temporary fluid recirculation inherent in the well drilling method. Thus, this interpretation is rejected.

D. Exclusion of Certain Evidence the County Proposed to Present at Hearing

171. As noted in the Preliminary Statement, the undersigned excluded, as irrelevant, certain evidence that the County proposed to present at the final hearing, specifically: (1) evidence showing that, as a condition precedent to requiring the implementation high-level disinfection at the Plant, the fluid movement into a USDW at the Site will cause a violation of primary drinking water standards or adversely affect the health of persons; (2) evidence of the financial impact to the County of requiring the implementation of high-level disinfection at the Plant; (3) evidence of whether high-level disinfection is environmentally harmful; and (4) evidence of whether the alleged adverse environmental impacts of high-level disinfection outweigh the potential

benefits of high-level disinfection. The undersigned's basis for excluding this evidence is explained in volume I of the Transcript.

E. Conclusion

172. Based on the foregoing, it is concluded, as a matter of fact, and pursuant to chapter 62-528 and incorporated federal regulations, that DEP failed to sustain its burden to demonstrate, in this de novo proceeding under sections 120.569 and 120.57(1), that the County's UIC wells have caused or may cause fluid movement into a USDW as prohibited by chapter 62-528 and the incorporated federal regulations. Accordingly, it is concluded that the County is not required to implement high-level disinfection at the Plant.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is RECOMMENDED that DEP enter a final order: (1) determining that DEP failed to demonstrate that the County's UIC wells have caused or may cause fluid movement into a USDW as prohibited by chapter 62-528 and the incorporated federal regulations; (2) ordering that the County is not required to implement high-level disinfection at the Plant; and (3) rescinding the HLD Letter.

DONE AND ENTERED this 30th day of March, 2022, in Tallahassee, Leon County, Florida.

CATHY M. SELLERS Administrative Law Judge 1230 Apalachee Parkway Tallahassee, Florida 32399-3060 (850) 488-9675

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Filed with the Clerk of the Division of Administrative Hearings this 30th day of March, 2022.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.