IN THE

ARIZONA COURT OF APPEALS

DIVISION ONE

SAN CARLOS APACHE TRIBE, *Appellant*,

v.

STATE OF ARIZONA; ARIZONA WATER QUALITY APPEALS BOARD; ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, *Appellees*.

RESOLUTION COPPER MINING, LLC,

Intervenor/Appellee.

No. 1 CA-CV 21-0295
FILED 11-15-2022

Appeal from the Superior Court in Maricopa County
No. LC2019-000264-001
The Honorable Sigmund G. Popko, Judge *Pro Tempore*

VACATED

COUNSEL

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OPINION

Vice Chief Judge David B. Gass delivered the opinion of the court, in which Presiding Judge Paul J. McMurdie joined. Judge Angela K. Paton dissented.

G A S S, Vice Chief Judge:

¶1 San Carlos Apache Tribe (the Tribe) argues Resolution Copper Mining LLC's (Resolution) copper-mining site is a new source under the Clean Water Act (CWA) because Resolution recently sank shaft 10. The CWA treats the new mine shaft as a "new source" because it is substantially independent of the non-contiguous original deposit at the mining site. In short, Resolution radically changed the nature of its existing mining site when it added the new mine shaft—a 7,000-foot-deep shaft designed to use a different mining technique to access a previously untouched, massive copper ore deposit that Resolution predicts will "supply more than 25% of America's demand for [copper] over the next 40 years."

¶2 As a result, before the Arizona Department of Environmental Quality (ADEQ) issues a permit to allow Resolution to operate the new mine shaft, ADEQ must adopt Total Maximum Daily Loads (TMDLs) for Resolution's discharge of stormwater and non-stormwater—including treated mine water, industrial water, and seepage pumping—into Queen Creek near the town of Superior because Queen Creek is "impaired" for copper under the CWA.

FACTUAL AND PROCEDURAL HISTORY

¶3 The controversy arises because ADEQ renewed Resolution's Arizona Pollution Discharge Elimination System (AZPDES) Permit No. AZ0020389 (the permit). The permit ensures Resolution complies with CWA water quality standards for copper mining. The permit authorizes Resolution to discharge (1) stormwater and (2) non-stormwater, including treated mine water, industrial water, and seepage pumping.

¶4 The permit also authorizes Resolution to discharge those waters into an unnamed tributary to Queen Creek near the town of Superior. Queen Creek is "impaired" for copper under § 303(d) of the CWA. *See* 33 U.S.C. § 1313(d). When discharging into an impaired waterway, mines may not exceed TMDLs. *See infra* ¶ 64–68. As such, Resolution and

ADEQ began drafting TMDLs for pollutants for the impaired waterway, but the TMDLs remain in draft form. *See* 40 C.F.R. § 130.7. The issue here is which comes first: the permit or the TMDL. We conclude it is the TMDL.

I. Historical Mining At The Superior Site

¶5 Resolution's mining site occupies a broad area of land in and near Superior, and Resolution uses it for underground copper mining activities. This area includes the Superior Operations Mine, located along Superior's northern boundary. Resolution's mining site also includes surface facilities located 0.22 miles north of Queen Creek in two non-contiguous areas identified as the West Plant Site (the WPS) and the East Plant Site (the EPS). The WPS is located immediately northwest of Superior. The EPS is located two miles east of Superior near the intersection of Highway 177 and U.S. Highway 60. The mining site included two large copper-ore deposits. The first was the now-exhausted ore body, originally owned by Magma, located in the WPS. The second is the recently discovered and untouched Resolution ore body located in the EPS.

¶6 Resolution's mining site has a deep history. Resolution acquired the mining site from a long line of owners, stemming back to Magma, which built the first iteration of the mining site at the WPS in 1912. Magma constructed shafts Nos. 1 through 8 on the WPS as part of its original mining site. In the 1970s, Magma constructed shaft 9 on the EPS to facilitate better access to the Magma ore body. Before that, the Magma ore body was not accessible via the EPS. Magma also constructed shaft 9 to identify other ore bodies in the EPS. Magma connected the EPS to the WPS through a tunnel facility called the Never Sweat Tunnel. Magma used the Never Sweat Tunnel to transport copper ore from shaft 9 to processing facilities at the WPS.

II. Modern Development of the Superior Site

¶7 At one time, the owners extracted ore from the Magma ore body. For extended periods, the owners left the site all but destitute aside from doing the bare minimum to maintain the site, including groundwater pumping and exploration. In the early-to-mid 1990s, the owner at the time, Broken Hill Proprietary Company, Ltd. (BHP), discovered the untouched Resolution ore body in the EPS.

¶8 Even after BHP discovered the Resolution ore body, BHP ceased actively mining ore at the Superior mining site in 1996 when it depleted the remaining mineable reserves out of the Magma ore body. Two years later, BHP ceased all other ore mining activities—except for applying

to renew the permit—for a variety of reasons, including the costs of maintaining the mining site, falling copper prices, limited data on the Resolution ore body, and a lack of suitable infrastructure to exploit the Resolution ore body. Since discovering the Resolution ore body more than two decades ago, no mine owner has extracted ore.

¶9 Starting in 2000, the Superior mining site ownership changed hands, and Resolution began exploring. In 2004, Resolution began planning new additions at its mining site, including shaft 10, a cooling tower, rock stockpiles, wash bays, and a Mine Water Treatment Plant (MWTP). In 2008, Resolution began constructing shaft 10—the most significant addition. Around this time, Resolution also resumed dewatering at the existing Magma facilities to help facilitate a study for its new construction plans. Dewatering uses water through a system of pumps, pipes, and conveyances to process and access ore and mine discharge drainage.

¶10 By December 2014, Resolution spent approximately $500 million to complete shaft 10. Shaft 10 is 30 feet in diameter and extends 6,943 feet below ground surface (bgs). Resolution built shaft 10 about 300 feet away from shaft 9. Shaft 9, by contrast, only extends 4,882 feet bgs—more than 2,000 feet shy of shaft 10's depth. Resolution rehabilitated and extended the Never Sweat Tunnel as part of constructing shaft 10.

¶11 Since Resolution constructed shaft 10, the only parts of the original mining site remaining operational are the Never Sweat Tunnel and shafts 8 and 9. Resolution uses shaft 8 to dewater the WPS. Resolution uses shaft 9 to support shaft 10, such as for ventilation and flowing mine drainage from shaft 9 to shaft 10. Resolution still actively uses the Never Sweat Tunnel to pump mine drainage from shaft 10 to the WPS, where the MWTP processes it. Resolution's focus with building the new facilities, like shaft 10, has been to target the yet untouched Resolution ore body.

¶12 Resolution plans to access the Resolution ore body using panel caving. Panel caving is a variation of the high-volume technique known as block caving. Previously, the Superior site owners used adits and tunnels. With panel caving, Resolution will access the ore by caving in the ore zone and causing it to collapse—which will eventually cause ground subsidence. Resolution predicts the Resolution ore body will "supply more than 25% of America's demand for [copper] over the next 40 years."

III. National Pollutant Discharge Elimination System (NPDES) And AZPDES Permitting Activities

¶13 The Environmental Protection Agency (EPA) issued the original permit in 1975. The EPA issued the permit, including its renewals, until 2002, when the State of Arizona took primacy over the CWA and the NPDES permitting. Since then, ADEQ has issued permits to individuals, including Resolution for its copper-mining site.

¶14 In 2015, Resolution applied to renew the permit. In 2017, ADEQ issued the renewed permit, which had an effective date of January 23, 2017, and an expiration date of January 22, 2022. The renewed permit allowed Resolution to operate its mining site, including shaft 10 and the other new facilities at the site, and treated them as existing sources.

IV. Procedural Posture and Permitting Challenges

¶15 Several months after the renewal, the Tribe challenged ADEQ's treatment of shaft 10 and several other new facilities before the Water Quality Appeals Board (the Board). The Tribe argued those facilities were new sources, not existing sources, under 40 C.F.R. §§ 122.2, 122.29. The Board referred the matter to the Office of Administrative Hearings (OAH) for an evidentiary hearing. In February 2018, OAH held the hearing before an OAH administrative law judge (ALJ). And on October 15, 2018, the ALJ issued findings of fact and conclusions of law, deciding ADEQ generally did not act arbitrarily and capriciously when it renewed the permit in 2017. The ALJ, however, took exception to ADEQ's failure to consider whether Resolution's new facilities, including shaft 10, were new sources under 40 C.F.R. §§ 122.2, 122.29(b). *See infra* ¶ 37. The ALJ, thus, recommended the Board remand the matter to ADEQ to conduct a new source analysis under 40 C.F.R. § 122.29(b). The ALJ did not decide whether Resolution's site was a new source.

¶16 In November 2018, the Board remanded the matter to ADEQ to conduct a new source analysis. The Board's remand order also allowed ADEQ to ignore some of the ALJ's findings of fact and conclusions of law when ADEQ conducted the new source analysis.

¶17 In 2019, ADEQ issued its new source analysis. ADEQ's new source analysis concluded Resolution's mining site was not subject to new source performance standards (NSPS) because the site was an existing source under 40 C.F.R. §§ 122.2, 122.29(b) and did not contain new sources under the CWA. *See infra* ¶ 37. ADEQ reasoned new source standards must apply to "the mine as a whole" and not to discrete facilities, such as shaft

10 because the regulations only provide independently applicable standards for copper mines and not for any of the new features.

¶18 In March 2019, the Tribe challenged the Board's November 2018 order remanding the matter for ADEQ to conduct a new source analysis, arguing it was error for the Board to allow ADEQ to ignore certain portions of the ALJ's findings of fact and conclusions of law.

¶19 In June 2019, the Board issued its final administrative decision, upholding ADEQ's issuance of the permit to Resolution. The Board also denied the Tribe's challenge to the Board's November 2018 order. In doing so, the Board adopted all the ALJ's findings of fact, including those it allowed ADEQ to ignore in its November 2018 order.

¶20 The Tribe appealed the Board's 2019 decision to the superior court under A.R.S. § 12-905. The superior court upheld the Board's decision, including its findings of fact and conclusions of law. The Tribe timely appealed. This court has jurisdiction under article VI, section 9, of the Arizona Constitution, and A.R.S. §§ 12-913, 12-120.21.A.1, and 12-2101.A.1.

ANALYSIS

V. The Validity Of The Permit Is Not Moot.

¶21 Because the permit at issue here expired on January 22, 2022, this appeal appears to lack a live controversy. *See Kondaur Cap. Corp. v. Pinal Cnty.*, 235 Ariz. 189, 192–93, ¶¶ 8–9 (App. 2014) (issues involving a corporation's ability to seek enforcement of a writ of restitution allowing it to evict occupants of its property became moot when the occupants already were evicted by other means). The parties did not raise mootness. We questioned the parties about mootness at oral argument, and, therefore, exercise our discretion to decide whether this matter has become moot. *See Big D Constr. Corp. v. Court of Appeals for State of Ariz., Div. One*, 163 Ariz. 560, 562–63 (1990).

¶22 The issue here presents a live controversy despite the appearance to the contrary. ADEQ is authorized to administratively extend expired AZPDES permits if: (1) the owner of the mining site applies for a renewal of its permit 180 days before the permit expires and (2) ADEQ has not yet issued a new permit to the owner. *See* 40 C.F.R. § 122.6(d) ("States authorized to administer the NPDES program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows."); A.A.C. R18-9-B904.B.1 (AZPDES permittee must apply to renew its permit 180 days before the permit expiration date); A.A.C. R18-9-B904.C

(continuation beyond the AZPDES permit date is permitted if: (1) the permittee has timely applied before the permit expires and the permitted activity is continuing; and (2) ADEQ "is unable, through no fault of the permittee, to issue an AZPDES permit on or before the expiration date of the existing permit"). Here, we take judicial notice of Resolution applying to renew the permit on July 23, 2021—180 days before the permit expired. Draft Fact Sheet: Arizona Pollutant Discharge Elimination System (AZPDES), Ariz. Dep't of Env't Quality 1, https://static.azdeq.gov/pn/azpdes_rcml_fs.pdf (last visited Oct. 3, 2022); *see Giragi v. Moore*, 48 Ariz. 33, 41–42 (1936); Ariz. R. Evid. 201(b). We also take judicial notice of ADEQ issuing draft forms of the renewed permit. Draft Permit: Authorization to Discharge Under the Arizona Pollutant Discharge Elimination System, Ariz. Dep't of Env't Quality, https://static.azdeq.gov/pn/azpdes_rcml_dp.pdf (last visited Oct. 3, 2022); *see Moore*, 48 Ariz. at 41–42; Ariz. R. Evid. 201(b). Resolution, thus, continues to operate its mining site under the permit at issue here.

VI. The Tribe Untimely Appealed The Board's November 2018 Order.

¶23 The Tribe argues the Board erred when it did not give a written justification for the November 2018 order. In that order, the Board allowed ADEQ to disregard portions of the ALJ's findings of fact and conclusions of law. The Tribe argues the order modified the ALJ decision, requiring written justification. The State correctly contends the Tribe's challenge is untimely because the Tribe did not file its challenge until over 100 days later.

¶24 "[T]he decision of the Board [to reject or modify the ALJ's decision] is the final administrative decision." A.A.C. R2-17-124.A.2. Under A.R.S. § 12-904, a party must commence "an action to review a final administrative decision . . . by filing a notice of appeal within thirty-five days from the date" it receives a copy of that decision.

¶25 Because the Tribe waited over 100 days to challenge the Board's November 2018 order and the Board's decision to modify or reject an ALJ's decision was a final agency decision, the Tribe untimely challenged the Board's November 2018 order.

VII. Because The Parties Raise No Issues Of Fact On Appeal, We Need Not Address The 2021 Amendment To § 12-910.F Regarding This Court's Deference To Agencies' Determinations Of Questions Of Fact.

¶26 In 2021, during the pendency of this appeal, the Arizona Legislature modified § 12-910.F to include language providing, "In a proceeding brought by or against the regulated party, the court shall decide all questions of fact without deference to any previous determination that may have been made on the question by the agency." *See* 2021 Ariz. Laws, ch. 281, § 1 (S.B. 1063) (1st Reg. Sess.) (amending A.R.S. § 12-910.F). Before the amendment, Arizona courts held "a reviewing court may not substitute its judgment for that of the agency on factual questions or matters of agency expertise." *See WildEarth Guardians, Inc. v. Hickman*, 233 Ariz. 50, 53, ¶ 7 (App. 2013).

¶27 Resolution argues we should not decide the constitutionality of the 2021 amendment because none of the parties dispute any of the facts below. We agree.

¶28 The Tribe contends it raised issues of fact because it challenged the superior court's decision, "including the factual error that the Resolution [m]ine was the same mine as the more than 100-year-old Magma [m]ine." But, as we will discuss, this issue is a question of law, not fact. *See infra* ¶¶ 33–35. *Cf. State v. Romero*, 248 Ariz. 601, 604, ¶ 12 (App. 2020) (issue of whether the defendant knowingly engaged in criminal conduct is a question of fact because it "refers to factual knowledge"). The Tribe also contends whether the superior court's apparent assumption of the Tribe's motivations for disputing the permit improperly influenced its decision to uphold the permit is a question of fact. But the Tribe did not challenge any specific factual determinations below. Given the parties have not raised any factual issues on appeal, we need not resolve any questions of fact.

¶29 Accordingly, we need not resolve issues relating to the constitutionality of the 2021 amendment to subsection F.

VIII. Shaft 10 Is A New Source Under The CWA.

¶30 A "new source" under the CWA is "any building, structure, facility, or installation from which there is or may be a 'discharge of pollutants,' the construction of which commenced . . . [a]fter promulgation of standards of performance under section 306 of CWA which are applicable to such source." 40 C.F.R. § 122.2; *see also* 33 U.S.C. § 1316(a)(2)

(same). A source is "a new source only if a new source performance standard is independently applicable to it." 40 C.F.R. § 122.29(b)(2). By contrast, the CWA grandfathers in an "existing source," which is a source permitted before the EPA promulgated performance standards independently applicable to the source. NPDES Permit Regulations, 49 Fed. Reg. 37,998, 38,042–43 (Sept. 26, 1984) (to be codified at 40 C.F.R. § 122.21(k)(4)). This distinction exists because new sources "have never operated under a previously issued permit and . . . are considered to be in a better position than existing sources to install and 'start up' their equipment and meet the [more stringent NSPS] permit limitations." *Id.* at 38,034.

¶31 Resolution and the State argue all the sources in Resolution's mining site are existing sources under the CWA because a source must be subject to independently applicable standards to be a new source, and the only applicable standard applies to the "mine as a whole." Resolution and the State, therefore, conclude the mining site is not subject to NSPS because the mining site has existed since 1912, and as a result, any additional structure or facility must be an existing source.

¶32 The Tribe contends "discrete pollutant-generating structures and facilities can themselves be new sources[,]" including the additions Resolution made since the EPA promulgated standards for copper mining in 1982. The Tribe further contends Resolution's additions effectively created a distinct mine from the original Magma mine, and the new mine should be subject to new source analysis.

¶33 We first address our standard of review for ADEQ's determinations of issues related to the new source analysis. Second, we discuss whether the EPA promulgated any independently applicable standards for the types of sources Resolution constructed at its mining site after the EPA promulgated standards for copper—more specifically, we decide whether shaft 10 is a "mine" under 40 C.F.R. §§ 440.100, 440.132(a), (g). Third, we decide whether shaft 10 is subject to independently applicable NSPS. Fourth, we resolve whether shaft 10 is a new source under the 40 C.F.R. § 122.29(b)(1) criteria (further defining what is required for a source to be classified as a new source).

A. We Review ADEQ's New Source Analysis *De Novo*.

¶34 This court generally reviews *de novo* "the decisions reached by the administrative officer and the superior court" when reviewing questions of law involving an agency's "legal interpretation of a statute."

Eaton v. Ariz. Health Care Cost Containment Sys., 206 Ariz. 430, 432, ¶ 7 (App. 2003). Principles of statutory construction apply to federal regulations. *See Env't Def. v. Duke Energy Corp.*, 549 U.S. 561, 573–74 (2007) (applying principles of statutory construction to regulations the EPA promulgated under the Clean Air Act); *Time Warner Ent. Co., L.P. v. Everest Midwest Licensee, L.L.C.*, 381 F.3d 1039, 1050 (10th Cir. 2004) (applying "general rules of statutory construction" to Federal Communication Commission's regulations). This court construes a regulation "and its subsections as a consistent and harmonious whole." *See State v. Green*, 248 Ariz. 133, 135, ¶ 8 (2020).

¶35 This court starts by "giv[ing] words their plain meaning unless it is impossible to do so or absurd consequences will result." *Marsoner v. Pima Cnty.*, 166 Ariz. 486, 488 (1991); *see also Allstate Ins. Co. v. Universal Underwriters, Inc.*, 199 Ariz. 261, 264, ¶ 8 (App. 2000). When a case involves the intersection of multiple statutes or regulations, this court "construe[s] them together, seeking to give meaning to all provisions." *See State v. Francis*, 243 Ariz. 434, 435, ¶ 6 (2018) (cleaned up).

¶36 This court gives a federal agency's interpretation of the federal law it administers the level of deference annunciated by the United States Supreme Court in *Chevron U.S.A. Inc. v. Nat. Res. Def. Council*, 467 U.S. 837 (1984). *See Eaton*, 206 Ariz. at 434, ¶ 16. By contrast, "[a] state agency's interpretation of a federal statutes is not entitled to the deference afforded a federal agency's interpretation of its own statutes under *Chevron*." *Orthopedic Hosp. v. Belshe*, 103 F.3d 1491, 1495 (9th Cir. 1997); *see also Arizona v. City of Tucson*, 761 F.3d 1005, 1014 (9th Cir. 2014). Instead, this court "review[s] *de novo* a state agency's interpretation of a federal [law]." *See Belshe*, 103 F.3d at 1495. Further, the Arizona Legislature amended A.R.S. § 12-910.F (providing the standards of review for final administrative decisions) in 2018 to abolish what is commonly known as the *Chevron* doctrine in Arizona. *See* 2018 Ariz. Laws, ch. 180, § 1 (2d Reg. Sess.) (H.B. 2238) (amending A.R.S. § 12-910.E) ("In a proceeding brought by or against the regulated party, the court shall decide all questions of law, including the interpretation of a constitutional or statutory provision or a rule adopted by an agency, without deference to any previous determination that may have been made on the question by the agency.").

B. Because Shaft 10 Is A "Mine," It Is A Type Of Source Subject To CWA Copper Mining Regulations.

¶37 The State contends "independently applicable standard" under 40 C.F.R. § 122.29(b)(2) means the EPA must have made standards

independently applicable to the types of sources Resolution constructed at its site after 1982 to classify those sources as new sources. And the State urges this court to affirm ADEQ's decision to renew the permit because the only applicable standard under 40 C.F.R. § 440, Subpart J is for "the mine as a whole."

¶38 Under 40 C.F.R. § 122.29(b)(2), "[a] source meeting the requirements of paragraphs (b)(1)(i), (ii), or (iii) of this section is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger." *See In re: Phelps Dodge Corp., Verde Valley Ranch Dev.*, 10 E.A.D. 460, 2002 WL 1315601, at *15 (EAB 2002) (discussing the need for an independently applicable standard to categorize a source as a new source under the CWA). NSPS only go into effect once the EPA promulgates performance standards independently applicable to the type of source the EPA is permitting. 40 C.F.R. § 122.2; *see* 33 U.S.C. § 1316(a)(2).

¶39 The EPA promulgated the most recent performance standards for copper mines in 1982. Ore Mining and Dressing Point Source Category Effluent Limitation Guidelines and New Source Performance Standards, Final Rule, 47 Fed. Reg. 54,598 (Dec. 3, 1982). A source producing pollution from copper mining activities, thus, may only be a new source if it was constructed after 1982 and an independent standard applies to such a source. *See* 40 C.F.R. § 122.2; *see also* 33 U.S.C. § 1316(a)(2).

¶40 The standards for copper mining apply to only a few types of sources, and here the only applicable standard is for "mines." *See* 40 C.F.R. § 440.100(a) ("provisions of this subpart are applicable to discharges from . . . [m]ines that produce copper" from "open-pit or underground operations"). The other types of sources subject to independently applicable standards under this section are "mills" and "mines and mills," which do not apply here because there are no copper mills at issue. *See* 40 C.F.R. § 440.100(a)(2)–(4). A plain reading of the controlling regulations requires this result, and we agree with the State to the extent it argues the only independently applicable standard is for "mines." *See Marsoner*, 166 Ariz. at 488. But that determination does not end our analysis.

¶41 Because "mines" are the only type of source subject to independently applicable standards here, we must determine whether any sources Resolution constructed at its mining site after 1982 fall within the definition of a "mine." The EPA provides three terms guiding our interpretation of what a "mine" means. The first term, "active mining area," is "a place where work or other activity related to the extraction, removal,

or recovery of metal ore is being conducted." 40 C.F.R. § 440.132(a). The second term, "mine," is:

> [A]n *active mining area*, including all land and property placed under, or above the surface of such land, used in or resulting from the work of extracting metal ore or minerals from their natural deposits by any means or method, including secondary recovery of metal ore from refuse or other storage piles, wastes, or rock dumps and mill tailings derived from the mining, cleaning, or concentration of metal ores.

40 C.F.R. § 440.132(g) (emphasis added). The third and most expansive of the three terms, "site," means "the land or water area where any 'facility or activity' is physically located or conducted, including adjacent land used in connection with the facility or activity." 40 C.F.R. § 122.2.

¶42 These three terms are like nesting dolls in that an "active mining area" falls squarely within the definition of a "mine." Thus, if a source would qualify as an "active mining area," it would also qualify as a "mine." And because a "mine" and "active mining area" are each examples of "the land area where any 'facility or activity' is physically located or conducted," both an "active mining area" and "mine" neatly fit into the term "site." The term "site," however, cannot nest within the terms "mine" or "active mining area." *See infra* ¶ 44.

¶43 The State argues new additions to Resolution's mining site, including shaft 10, cannot be considered new sources because the only applicable standards are for "mines," which can only mean the "mine as a whole." But the term "mine," as defined by 40 C.F.R. § 440.132(g) (defining "mines" in the ore mining context, including copper mining), does not mean the "mine as a whole." Instead, a "mine" is a discrete structure used for "extracting ore or minerals," such as shaft 10. *See* 40 C.F.R. § 440.132(g) (a mine "is an active mining area, *including all land and property* placed under, or above the surface of such land, *used in or resulting from the work of extracting metal ore or minerals* from their natural deposits by any means or method") (emphasis added); 40 C.F.R. § 440.132(a) (an active mining area "is a place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted"); *see Marsoner*, 166 Ariz. at 488.

¶44 If the State was correct in arguing we must look to the mining site "as a whole," then it would render the new source rule under 40 C.F.R. § 122.29 null as applied to new facilities at mining sites. *See Chaparral Dev. v. RMED Int'l, Inc.*, 170 Ariz. 309, 313 (App. 1991) (this court harmonizes

conflicting language of different parts of the statute to give effect to both); *Cleckner v. Ariz. Dep't of Health Servs.*, 246 Ariz. 40, 43, ¶ 9 (2019) (this court strives "to give meaning to each word, phrase, clause and sentence so that no part of that legislation will be void, inert or trivial"); *see also Patterson v. Maricopa Cnty. Sheriff's Off.*, 177 Ariz. 153, 157 (App. 1993) (applying statutory construction principles to read a portion of a rule in harmony with other parts of the rule to "give effect to the [framers'] intent behind" the rule). Indeed, the EPA wrote 40 C.F.R. § 122.29 to provide a framework to decide whether an addition to a mining site is a new source. *See infra* ¶¶ 48–60.

¶45 Shaft 10 neatly falls within the description of a "mine," as opposed to a "site." As applied here, shaft 10 is an area of "land" (a 7,000-foot-deep hole) and "property" (a shaft is a man-made facility). *See* 40 C.F.R. § 440.132(g). Shaft 10 is located "under . . . the surface of such land," and Resolution has used the shaft to implement its plans to "extract[] metal ore or minerals from their natural deposits." *See* 40 C.F.R. § 440.132(g). And because Resolution is using shaft 10 to further its expansion of the site to extract copper from the new ore body, shaft 10 is "a place where work or other activity related to the extraction, removal, or recovery of metal ore is being [or will be] conducted." *See* 40 C.F.R. § 440.132(a). Shaft 10, thus, squarely falls within the plain meaning of the definitions of an "active mining area" and a "mine." As such, the EPA effectively provided an independently applicable standard for mining shafts—at least to the extent they qualify as "mines" or "active mining areas." *See Francis*, 243 Ariz. at 436, ¶¶ 9–10 (interpreting interrelated statutes together to discern their meaning); *cf. Verde Valley Ranch Dev.*, 10 E.A.D. 460, 2002 WL 1315601, at *16 ("Phelps Dodge's active maintenance of the tailings site (i.e., sprinkling with water to reduce dust blowing off the site surface) over the past years . . . cannot reasonably be categorized as active pursuit or processing of ore within the meaning of the copper mining NSPS."). Moreover, though the ALJ did not decide whether shaft 10 was a new source, the ALJ decided shaft 10 was a "mine" when the matter was before the OAH, in part, because Resolution was using it to further its mining activity, such as the production of mine drainage.

¶46 Further, contrary to the State's argument, the EPA's regulatory framework does not require us to consider all "active mining areas" within Resolution's mining "site" when determining whether a source is a new or existing source. Here, the State has confused the term "mine" with the term "site" when arguing we must consider "the mine as a whole." *See* 40 C.F.R. §§ 122.2, 440.132(g). In contrast to the EPA's definition of a "mine," the EPA's definition of a "site" includes "adjacent

land used in connection with the facility or activity." We cannot define a mining shaft as a "site" rather than a "mine" because of this additional requirement. Here, we have determined Resolution's shaft 10 is one "mine" of at least one or more "mines" or "active mining areas" operating within Resolution's mining "site." We, therefore, need not determine whether the mining site "as a whole" is a new source.

¶47 Our interpretation of the EPA's regulations is consistent with the EPA's guidance on new sources, which we find persuasive. *See Christensen v. Harris Cnty.*, 529 U.S. 576, 587 (2000) (an administrative body's informal guidance on a regulation is not binding but may be persuasive "to the extent that those interpretations have the 'power to persuade'") (citations omitted). Indeed, the EPA provided several materials explaining parts of a discharger's site may be subject to NSPS while others are subject to existing source standards when the discharger constructs a new building, structure, or installation at a site. *See* Memorandum from Linda Boornazian, Director Water Permits Division, Office of Wastewater Management, and Mary Smith, Engineering & Analysis Division, Office of Science & Technology Office of Water, to Regional Water Division Directors, at 3 (Sept. 28, 2006) ("[I]f the new source is a new installation of process equipment at an existing facility, part of the facility may be subject to existing source standards and other parts of the facility subject to new source standards."); NPDES Permit Regulations, 49 Fed. Reg. 37,998, 38044 (Sept. 26, 1984) (to be codified at 40 C.F.R. § 122.29(b)) ("[I]f a facility replicates an existing facility, the fact that it shares or uses common land with another source does not prevent it from being considered a new source.").

¶48 Resolution, nonetheless, argues its interpretation of the new source regulations, requiring this court to look to the "whole mine" when deciding whether shaft 10 is a new source, is consistent with EPA interpretations of a new source. Resolution cites past NPDES permits to support its proposition. Though EPA interpretations of regulations do not necessarily receive *Chevron* deference, "[c]ogent [federal] administrative interpretations . . . warrant respect." *Alaska Dep't of Env't Conservation v. U.S. E.P.A.*, 540 U.S. 461, 488 (2004). But Resolution's examples of past EPA permitting decisions are distinguishable from the permit here because none were for underground copper mines. Several of the cited EPA permits, for instance, were for coal mines, which are subject to "new source coal mine" standards. *See* 40 C.F.R. § 434.11(j)(1). Even so, those permits do not necessarily assist Resolution's proposition, and some even cut against it. Indeed, the regulatory definition of "new source coal mine" requires agencies to consider whether the regulated body created new shafts when

deciding if a mine is a new source. *See* 40 C.F.R. § 434.11(j)(1) (a new source may also arise from a "major alteration" to an existing site, such as the "construction of a new shaft"). A new shaft, therefore, could be a "mine" and new source in the context of a coal mine as well.

C. Because Shaft 10 Is A "Mine" And Shaft 10 Produces Mine Drainage, Shaft 10 Is Subject To "Independently Applicable Standards."

¶49 For an agency to classify a source as a new source, the source must:

> (1) Be one of the types of sources the EPA has enumerated as being applicable to performance standards—here, the applicable regulation is 40 C.F.R. § 440.100 (listing the types of sources subject to copper mining standards)—and
>
> (2) Produce the type of wastewater discharge governed by the NSPS.

See 40 C.F.R. § 122.29(b)(2) (a source meeting the requirements of § 122.29(b)(1) "(i), (ii), or (iii) is a new source only if a [NSPS] is independently applicable to it"). Here, NSPS are independently applicable to shaft 10. First, as explained above, shaft 10 is a "mine" and, thus, is one of the types of sources specifically promulgated as applicable to the standards for copper. *See supra* ¶¶ 44–47. Second, shaft 10 is subject to NSPS under 40 C.F.R. § 440.104(a) because this standard applies to mine drainage from underground copper mining operations and shaft 10 produces mine drainage.

¶50 The dissent believes we embark on our analysis out of order. As explained above, ignoring whether a new construction is a mine undercuts the effect of entire sections of federal regulations. We decline this path and instead give force to every word of the regulations by considering whether shaft 10 is a mine. In doing so, traditional canons of statutory interpretation guide our path. And ADEQ's own flow chart confirms our approach. *See Appendix A.*

¶51 Accordingly, the EPA has provided an independently applicable NSPS standard for shaft 10. But that does not end our analysis.

D. Shaft 10 Is A New Source Under The 40 C.F.R. § 122.29(b) Criteria.

¶52 Next, to determine whether shaft 10 is a new source, we must decide if it meets one of the three new source criteria under 40 C.F.R. § 122.29(b). Because we decide only whether the third criteria applies, we decline to address the parties' arguments about the other two criteria.

¶53 To be classified as a new source, a source must meet one of the following criteria: (1) "[i]t is constructed at a site at which no other source is located"; (2) "[i]t totally replaces the process or production equipment that causes the discharge of pollutants at an existing source"; or (3) "[i]ts processes are substantially independent of an existing source at the same site." 40 C.F.R. § 122.29(b)(1)(i)–(iii).

¶54 The State argues shaft 10 is not "substantially independent" from other structures on the site but is fully integrated, and thus should not be considered a new source. Because Resolution only recently built shaft 10, heavily modified other nearby existing structures to facilitate the use of shaft 10, and operated or has plans to operate shaft 10 for copper mining so as not to replace but replicate existing source's copper mining activity, we disagree.

¶55 In 1984, the EPA amended the third prong—regarding "whether the [source's] processes are substantially independent"—of the new source analysis test by requiring agencies to consider factors: (1) "the extent to which the new facility is integrated with the existing plant"; and (2) "the extent to which the new facility is engaged in the same general type of activity as the existing source." *See* NPDES Permit Regulations, 49 Fed. Reg. 37,998, 38,048 (Sept. 26, 1984) (to be codified at 40 C.F.R. § 122.29(b)(1)(iii)).

¶56 The application of the 40 C.F.R. § 122.29(b)(1)(iii) criterion presents an issue of first impression to this court. The State, Resolution, and the Tribe provided no authority other than federal guidance from the EPA, and—aside from that guidance—we also found none.

¶57 The State contends categorizing any new facilities in the mining site, such as shaft 10, would contradict the EPA's intent when it amended 40 C.F.R. § 122.29(b)(1)(iii) by adding two additional factors. To support this proposition, the State cites the EPA's discussion of the policy and application of the "substantially independent" factor in NPDES Permit Regulations, 49 Fed. Reg., 37,998, 38,048 (Sept. 26, 1984). But the EPA's

guidance on the new rule establishes shaft 10 is a new source. Under the first of the two new factors, the EPA explains:

> [A] minor change[, such as a plant's installation of a new purification step in its process, like a new filter or distillation column,] would be integral to existing operations and would not require the facility to be reclassified as a new source. However, on the other extreme, if the only connection between the new and old facility is that they are supplied utilities such as steam, electricity, or cooling water from the same source or that their wastewater effluents are treated in the same treatment plant, then the facility will be a new source.

Id. Here, shaft 10 falls in the latter category as shaft 10 is not some insignificant process added to Resolution's mining site. Instead, shaft 10 is a brand new 7,000-foot-deep mining shaft. And though shaft 10 uses other facilities from other areas of the mining site to assist in ore production, such as Resolution's use of shaft 9 to pass mine drainage from shaft 9 to shaft 10, other pertinent facts show shaft 10 is a new source. Resolution modified several of these pre-existing structures, such as the Never Sweat Tunnel, to facilitate its $500 million investment in shaft 10. Further, Resolution also built shaft 10 over 300 feet away—laterally from shaft 9—to construct a new underground mining operation to extract copper from the new and as yet untouched ore body in the EPS.

¶58 The EPA's guidance on the second factor—whether the source engages in the "same general type of activity as the existing source"—also cuts against the State's argument. Under the second factor, the EPA explains, "if the proposed facility is engaged in a sufficiently similar type of activity as the existing source, it will not be treated as a new source." *Id.* at 38,044. On first blush, Resolution's plans to use shaft 10 to mine copper appear to fall under the same type of activity at the mining site—specifically, copper mining. *See id.* ("For example, if a plant begins to produce a new product, e.g., nylon synthetic fiber, which is very similar to the product currently being produced by that plant, e.g., polyester synthetic fiber, using equipment that is essentially the same as the existing production equipment, this would likely be considered an existing source."). The EPA, however, goes on to explain, "Of course, to the extent the construction results in facilities engaged in the same type of activity because it essentially replicates, without replacing, the existing source, the new construction would result in a new source." *Id.* On this precise point, the State's argument collapses in on itself.

¶59 Resolution built shaft 10, a completely new mining shaft, exceeding the depth of the nearest shaft (shaft 9) by over 2,000 feet bgs. And Resolution constructed shaft 10 approximately 300 feet away from shaft 9. Though Resolution repurposed shaft 9 to help facilitate mining in shaft 10 and no longer uses shaft 9 for mining ore, Resolution still has plans to expand shaft 9 by extending it to the same depth as shaft 10. And though Resolution has plans to stop using shaft 9 to extract copper ore, none of the parties have given us any reason to determine Resolution is using shaft 10 to replace shaft 9. Instead, Resolution built structures, such as shaft 10, to expand its mining site to begin mining the new, untouched ore body on the EPS—a feat BHP was unable to accomplish with the limited capabilities of older structures like shaft 9. Resolution also plans to use panel caving, a new and high-volume mining technique to access the untouched ore body, which Resolution's predecessors did not use when shaft 9 was producing ore. Resolution, thus, "replicated" the WPS when it constructed shaft 10 in the hopes of supplying over a quarter of our nation's copper needs. Indeed, the ALJ even referred to Resolution's site as being made up of "two non-contiguous areas," the EPS and the WPS, which the superior court adopted on appeal. Our determination is consistent with ADEQ's concession that "shaft 10 would be a new source" if it had been subject to independently applicable performance standards.

¶60 Moreover, the State's use of other portions of the EPA's guidance is unconvincing and, in fact, supports a contrary result to the one it urges us to adopt. The State, for instance, cites to a portion of the EPA's guidance explaining the "substantial independence test was aimed at ascertaining whether an existing source which undertakes major construction that legitimately provides it with the opportunity to install the best and most efficient production processes and wastewater treatment technologies should be required to meet new source performance standards at that facility." *See* NPDES Permit Regulations, 49 Fed. Reg. 37,998, 38,043 (Sept. 26, 1984). Indeed, Resolution built shaft 10 well after 1982 and at a time when it had "the opportunity to install the best and most efficient production processes and wastewater treatment technologies." *See id.* And because Resolution "undert[ook] major construction" when it recently dug shaft 10, the facility, according to the EPA's own words, "should be required to meet new source performance standards." *See id.* And, as the ALJ aptly observed, the State's argument "that any new buildings, structures, facilities, or installations constructed at a copper mine that began operations before Subpart J was promulgated" is inconsistent with the regulatory framework and EPA guidance. A contrary result would mean Resolution could continuously sink shafts into its property and perpetually

expand its mining site without being subject to NSPS so long as those structures were constructed on lands adjacent to its copper mining site.

¶61 Accordingly, shaft 10—though not completely independent from other sources—is substantially separate to be classified as a new source under § 122.29(b)(1)(iii). Shaft 10, thus, is a new source and Resolution's mining site is subject to NSPS under 40 C.F.R. § 440.104(a).

IX. To Comply With The CWA And For ADEQ To Permit Resolution's Site, Resolution And ADEQ Must Finalize The Ongoing TMDLs For Queen Creek, And Resolution Must Show The Site Will Comply With Applicable Water Quality Standards.

¶62 The Tribe contends ADEQ may not issue the permit to Resolution because shaft 10 is a new source and Queen Creek is an impaired waterway. We disagree. Though permitting a new source for impaired waterways is more arduous, the CWA does not prohibit such an action. *See Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007, 1013 (9th Cir. 2007).

¶63 Because shaft 10 is a "new source" within the meaning of 40 C.F.R. § 122.2, ADEQ may not renew the permit until: (1) ADEQ finalizes a TMDL plan for the receiving water segment; (2) Resolution demonstrates the existence of sufficient copper load allocations to allow for the proposed discharge; and (3) Resolution demonstrates the existence of water quality compliance schedules for the segment. *See* 40 C.F.R. § 122.4(i); *Pinto Creek*, 504 F.3d at 1012.

¶64 The CWA preserves and restores the integrity of navigable waters by controlling both point and nonpoint pollution sources. 33 U.S.C. § 1251(a)(7). Point sources are discrete conveyances, including pipes, ditches, or other outfalls. 33 U.S.C. § 1362(14). "Nonpoint sources of pollution are non-discrete sources," such as agricultural runoff. *Pinto Creek*, 504 F.3d at 1011. Section 303 of the CWA requires states to identify waters not meeting applicable water quality standards. 33 U.S.C. § 1313(d)(1)(A). In Arizona, ADEQ prepares a list of those "impaired" waters and indicates the pollutant(s) causing impairment. A.R.S. § 49-232; *see also* 33 U.S.C. § 1313(d).

¶65 CWA section 303 also requires states to determine the maximum amount of a given pollutant an impaired water can absorb but still meet water quality standards. 33 U.S.C. § 1313(d)(1)(C). Using this determination, ADEQ develops TMDLs for impaired waters. A.R.S. § 49-234.A. TMDLs are informational tools establishing attainment targets for pollutants, allocating discharge amounts, and aiding with attainment

planning. *See* 40 C.F.R. §§ 130.2(e)–(i), 130.7(c); *see also Pronsolino v. Nastri*, 291 F.3d 1123, 1127–29 (9th Cir. 2002). TMDLs are comprised of a water's waste load allocation (WLA) and its load allocation (LA) plus a margin of safety. Overview of Total Maximum Daily Loads, Envt'l Prot. Agency, https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls (last updated Aug. 31, 2022). WLAs represent the sum-total pollutant allocations for all point sources. In contrast, LAs are the sum total allocations for nonpoint and background pollution. *Id.*

¶66 Special rules apply to permits authorizing a discharge into impaired waters. 40 C.F.R. § 122.4(i); *see also Pinto Creek*, 504 F.3d at 1011. Federal regulations broadly prohibit issuing a permit to a new source proposing to discharge into impaired waters. *See* 40 C.F.R. § 122.4(i); *Pinto Creek*, 504 F.3d at 1012. This ban, however, is not absolute. *Pinto Creek*, 504 F.3d at 1013. The relevant regulation reads in part:

> No permit may be issued:
>
> . . . .
>
> (i) To a new source or new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards . . . and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:
>
> (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
>
> (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

40 C.F.R. § 122.4.

¶67 This court reviews administrative regulations like statutes and interprets the regulations to further the intent of the enabling legislation. *Cooke v. Ariz. Dep't of Econ. Sec.*, 232 Ariz. 141, 144, ¶ 13 (App. 2013). The plain meaning of subsection (i)'s first sentence lays out a default rule: no permit may be issued to a new source causing or contributing to a

violation of water quality standards. *Cf. State ex rel. Winkleman v. Ariz. Navigable Stream Adjudication Comm'n*, 224 Ariz. 230, 240, ¶ 24 (App. 2010) ("We look to the plain language . . . because it is the best evidence of the legislature's intent."). Under this rule, it would be nearly impossible for a new source to obtain a permit to discharge into impaired waters. But, when reading the regulation as a whole, the operator of a new source has two clearly defined steps it may take to show it will not "cause or contribute" to a violation of water quality standards. *Cf. Stambaugh v. Killian*, 242 Ariz. 508, 509, ¶ 7 (2017) (use context to interpret words and provisions).

¶68 The EPA has interpreted 40 C.F.R. § 122.4(i)(1) and (2) to require a demonstration of sufficient loading capacity in a segment's WLAs to accommodate the new discharge in addition to the existence of compliance schedules. *In re: Carlota Copper Co.*, 11 E.A.D. 692, 765, 2004 WL 3214473, at *55 (EAB 2004). Stated more plainly, the party seeking the permit must show: (1) the segment's TMDL allocations can accommodate the proposed additional point source; and (2) existing point sources are subject to plans detailing the changes needed to bring the segment into compliance. *See Pinto Creek*, 504 F.3d at 1012–15. Once the operator of a new source establishes those two conditions, or if the director of the permitting department determines the department already has adequate information establishing those two conditions, the new source will not "cause or contribute" to continued water quality violations. 40 C.F.R. § 122.4(i).

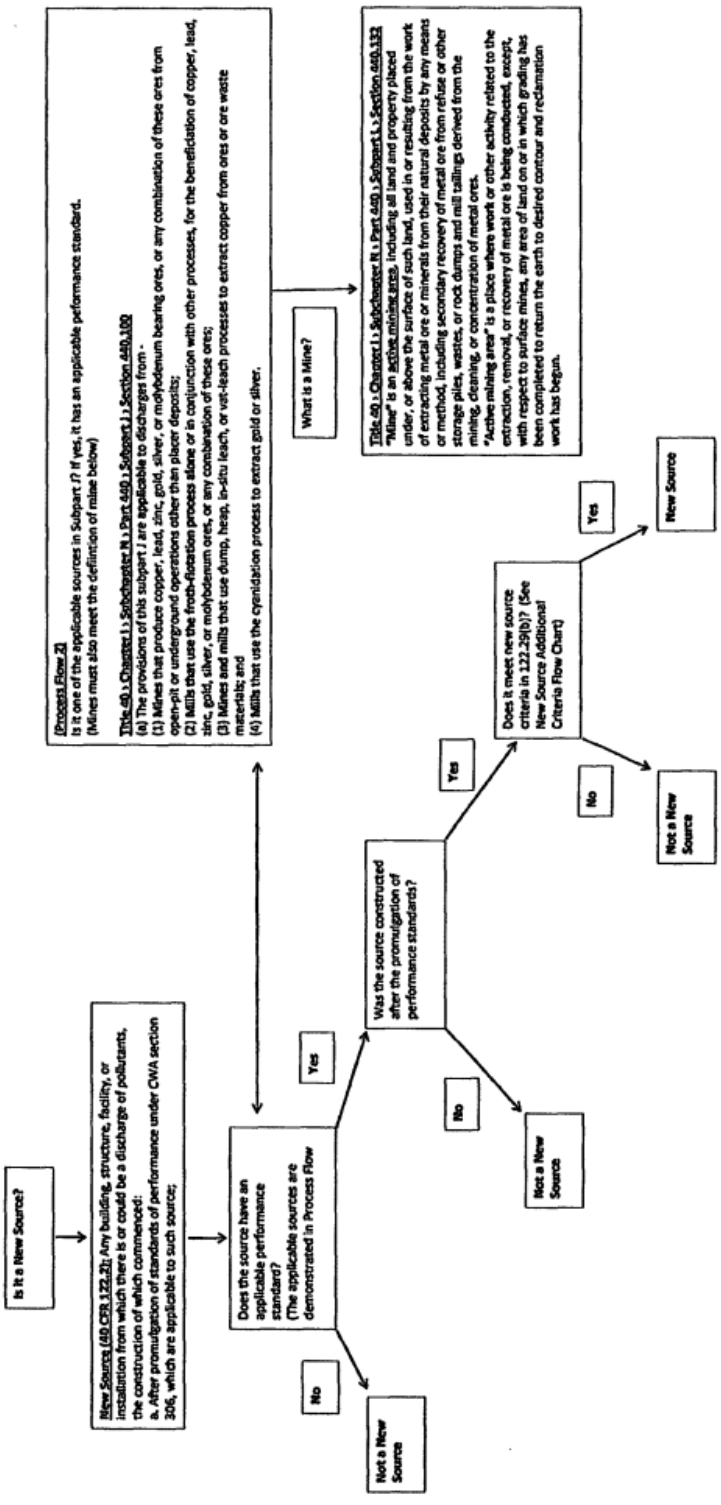
¶69 Here, the CWA lists the tributary of Queen Creek—the proposed receiving water—as impaired for copper. Because of this impairment, ADEQ must finalize the TMDLs before issuing a permit for any new source. ADEQ, thus, erred in not finalizing the TMDLs before renewing the permit. *See* 40 C.F.R. § 122.4(i); *see also Pinto Creek*, 504 F.3d at 1012.

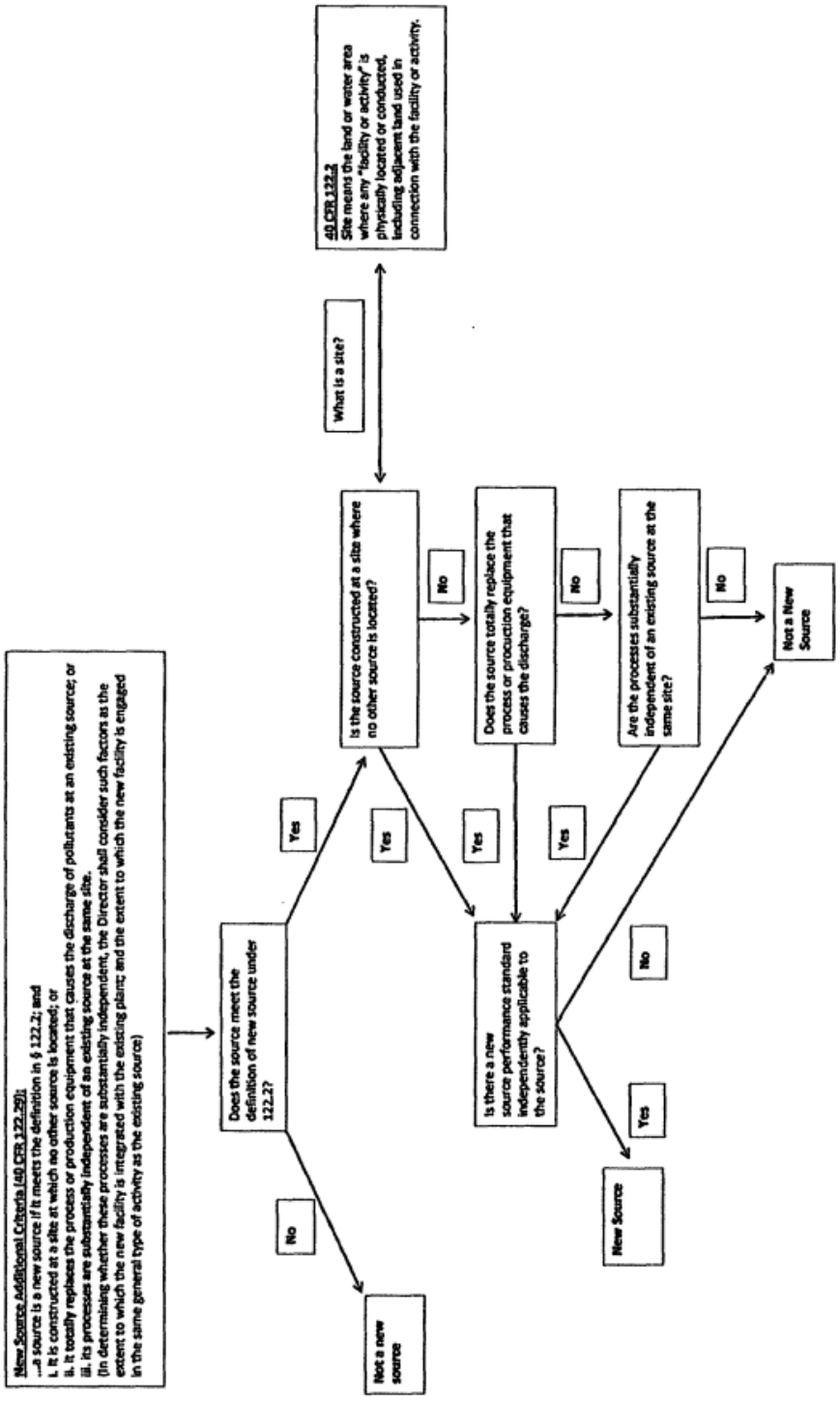
¶70 The parties devote most of their briefings to whether shaft 10 is a new source. Resolution, however, preserves one argument pertinent to 40 C.F.R. § 122.4(i). Resolution contends a discharge by itself "would not cause or contribute to [the] impairment of Queen Creek." In support, Resolution points to Andy Koester, Manager of the AZPDES Permit Unit, who testified Resolution would not cause or contribute to a violation of water quality standards if their discharges do not exceed the limitations of the permit. Though this nascent argument does not directly address 40 C.F.R. § 122.4, it may suggest the federal regulation's prohibition against permitting new sources does not apply. And to the extent Koester's argument does, we disagree.

¶71 This court gives meaning to every word and provision in a regulation, rendering none superfluous. *See Garcia v. Butler*, 251 Ariz. 191, 194, ¶ 12 (2021). Koester's testimony may be probative on whether the TMDL's load allocation can accommodate the proposed discharge—as required by 40. C.F.R. § 122.4(i)(1). Alternatively, the testimony may help demonstrate the existence of compliance schedules designed to bring the relevant segment of Queen Creek into compliance—as required by 40 C.F.R. § 122.4(i)(2). His testimony, however, does not allow us to ignore those requirements, essentially rendering them nugatory. Instead, Resolution must comply with all 40 C.F.R. § 122.4's requirements before ADEQ may issue an AZPDES permit. Further, during oral argument, Resolution said it is already subject to the most stringent standards for existing sources, so treating shaft 10 as a new source is merely a "labeling exercise." Indeed, Resolution may easily comply with applicable water quality standards. But the law still requires Resolution to show it can do so after ADEQ finalizes the TMDLs. Until then, ADEQ may not issue a renewal of the permit.

CONCLUSION

¶72 We vacate the superior court's orders and the decision of the Board upholding the validity of the permit. We remand this matter to ADEQ for further proceedings consistent with this decision.


Is It a New Source?
New Source (40 CFR 122.2): Any building, structure, facility, or installation from which there is or could be a discharge of pollutants, the construction of which commenced:
a. After promulgation of standards of performance under CWA section 306, which are applicable to such source;
Does the source have an applicable performance standard?
(The applicable sources are demonstrated in Process Flow
No
Not a New Source
Yes
(Process Flow 2)
Is it one of the applicable sources in Subpart J? If yes, it has an applicable performance standard.
(Mines must also meet the definition of mine below)
Title 40 ; Chapter I ; Subchapter N ; Part 440 ; Subpart J ; Section 440.100
(a) The provisions of this subpart J are applicable to discharges from -
(1) Mines that produce copper, lead, zinc, gold, silver, or molybdenum bearing ores, or any combination of these ores from open-pit or underground operations other than placer deposits;
(2) Mills that use the froth-flotation process alone or in conjunction with other processes, for the beneficiation of copper, lead, zinc, gold, silver, or molybdenum ores, or any combination of these ores;
(3) Mines and mills that use dump, heap, in-situ leach, or vat-leach processes to extract copper from ores or ore waste materials; and
(4) Mills that use the cyanidation process to extract gold or silver.
What is a Mine?
Title 40 ; Chapter I ; Subchapter N ; Part 440 ; Subpart A ; Section 440.132
"Mine" is an active mining area, including all land and property placed under, or above the surface of such land, used in or resulting from the work of extracting metal ore or minerals from their natural deposits by any means or method, including secondary recovery of metal ore from refuse or other storage piles, wastes, or rock dumps and mill tailings derived from the mining, cleaning, or concentration of metal ores.
"Active mining area" is a place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.
Was the source constructed after the promulgation of performance standards?
No
Not a New Source
Yes
Does it meet new source criteria in 122.29(b)? (See New Source Additional Criteria Flow Chart)
No
Not a New Source
Yes
New Source


New Source Additional Criteria (40 CFR 122.29):
...a source is a new source if it meets the definition in § 122.2; and
i. It is constructed at a site at which no other source is located; or
ii. It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
iii. Its processes are substantially independent of an existing source at the same site.
(In determining whether these processes are substantially independent, the Director shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source)
Does the source meet the definition of new source under 122.2?
Yes
No
Not a new source
Is the source constructed at a site where no other source is located?
Yes
No
What is a site?
40 CFR 122.2
Site means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.
Does the source totally replace the process or production equipment that causes the discharge?
Yes
No
Are the processes substantially independent of an existing source at the same site?
Yes
No
Not a New Source
Is there a new source performance standard independently applicable to the source?
Yes
No
New Source

P A T O N, J., dissenting:

¶73 While I concur with my colleagues as to the issues of mootness and the scope of our review, I respectfully dissent on two grounds.

¶74 First, in determining whether a construction is a new source, I would approach the CWA regulations in the order they are presented in the text of the regulation. Specifically, I do not agree that we are required to determine whether Shaft 10 is a "mine" in order to determine whether it is a new source. Second, under either approach, I do not find that Shaft 10 is substantially independent of an existing source, and would therefore affirm the superior court's ruling.

I. Correct Order of Application

¶75 The parties have centered their dispute on whether Shaft 10 is a "mine" as defined by the independently applicable NSPS. But we would not reach this question if we let the regulations speak for themselves. The parties' constructed framework, adopted by the majority, does not follow the order the regulatory text provides. I am unpersuaded by ADEQ's interpretation of the regulations as presented in the Appendix A flowchart, and we are not bound to apply it. A.R.S. § 12-910(F).

¶76 The three-step framework I would apply comes from the text of the applicable regulations and statutes, along with commentary from the EPA's 2006 memorandum summarizing its requirements for determining whether a source is a new source. *See* Memorandum from Linda Boornazian, Director Water Permits Div., Off. of Wastewater Mgmt., and Mary Smith, Eng'g & Analysis Div., Off. of Sci. & Tech., to Regional Water Div. Dirs., New Source Dates for Direct and Indirect Dischargers, at *3 (Sept. 28, 2006), (available at https://www.epa.gov/systems/files/documents/2021-07/newsource_dates.pdf) ("2006 Memorandum"). An agency seeking to determine whether a construction is a new source under the CWA should ask the following:

1. Does the construction meet the definition of a new source in 40 C.F.R. § 122.2? *See also* 33 U.S.C. § 1316.

    a. Has there been a construction of a "building, structure, facility, or installation" that does or will "discharge pollutants?" 40 C.F.R. § 122.2; *see also* 2006 Memorandum at *4.

b. Has construction commenced? 40 C.F.R. § 122.2; *see also* 2006 Memorandum at *5.

c. Did construction commence subsequent to the promulgation (or proposal) of standards of performance applicable to the source? 40 C.F.R. 122.2; *see also* 2006 Memorandum at *6.

If the answer to any subpart is no, the construction is not a new source.

2. If the answer to all subparts of Step 1 is yes, does the construction meet any of the following definitions of a new source in 40 C.F.R. § 122.29(b)(1)?

a. Is the construction at a site at which no other source is located? 40 C.F.R. § 122.29(b)(1)(i).

b. Does the construction totally replace the process or production equipment that causes the discharge of pollutants at an existing source? 40 C.F.R. § 122.29(b)(1)(ii).

c. Are its processes substantially independent of an existing source at the same site? 40 C.F.R. § 122.29(b)(1)(iii).

If the answer to all subparts is no, the construction is not a new source.

3. If the answer to all subparts of Step 1 and any subpart of Step 2 is yes, is there an "independently applicable" new source performance standard? 40 C.F.R. § 122.29(b)(2).

a. If yes, the source is a new source. *Id.*

b. If no, "*the source is a new discharge*." *Id.* (Emphasis added).

Section 122.2 determines whether the construction falls within regulated activity that *may* meet the new source definition. Section 122.29(b)(1) outlines the criteria for determining whether a source is a new source. And Section 122.29(b)(2) resolves whether the activity is a new source or, instead, a new discharge. It is this formula that I apply below.

II. Applying the Correct Test

¶77 As to Step 1, I am largely in agreement with the majority. If there is no new construction, there cannot be a new source. I agree that

Shaft 10 is a new construction, and that copper mining is clearly regulated by standards of performance under section 306 of the Clean Water Act. *See* 40 C.F.R. § 440.100. The majority, however, reads the requirement for merely "applicable" standards of performance under Section 122.2 in defining a new source with the requirement under Section 122.29(b)(2) for an "independently applicable" standard of performance for an entirely different purpose. *Supra* ¶ 30.

¶78 As a result, the majority's analysis concerning whether or not Shaft 10 is a "mine" takes Step 3 out of order. Indeed, the majority and the parties take it as given that if there is an independently applicable new source performance standard, the construction necessarily meets the definition of a new source. *See supra* ¶¶ 30-32, 37-48; *but see* 40 C.F.R. § 122.29(b). But the text of Section 122.29 does not say this. Instead, it provides:

> A source *meeting the requirements* of paragraphs (b)(1)(i), (ii), or (iii) of this section is a new source only if a[n] [NSPS] is independently applicable to it. If there is no such independently applicable standard, *the source is a new discharger*. *See* [40 C.F.R. § 122.2].

40 C.F.R. § 122.29(b)(2) (emphases added). Section (b)(2) applies on its own terms *after* an agency finds that the definition of a new source in 40 C.F.R. §§ 122.2 and 122.29(b)(1) are met. *Id.*

¶79 Section (b)(2) provides that the reason we look for an "independently applicable [NSPS]" is to determine whether we are looking at a "new source" or "a new discharger." There is no third option, and the regulation presumes that the regulator has made a determination as to the 'new-ness' of the source by the time it reaches (b)(2). *Id.* In other words, once the regulator gets to Step 3, if the new construction is not a new source, it is a new discharger. But the purpose of (b)(2) is *only* to determine whether the new source is, in fact, a new discharger, subject to distinct regulations from a source. *See* 40 C.F.R. § 122.2 ("New discharger"). And in interpreting the regulations here, we do not reach (b)(2).

¶80 Further, in reading together Section 122.2's requirement with 122.29(b)(2)'s requirement, the majority and parties disregard the use of the word "independently," which only appears in Step 3 and not Steps 1 or 2. At Step 1, we are not concerned with whether a construction is a "mine" or not; we look at whether the "industrial categor[y]" is covered under regulations promulgated under Section 306 of the CWA. *See* 67 Fed. Reg.

31,129, 31,135. In 2002, the EPA clarified the purpose of regulations promulgated under Section 306:

> Effluent limitation guidelines and new source performance standards ("effluent guidelines") promulgated under section 304 and 306 of the CWA establish limitations and standards for specified wastestreams from *industrial categories*, and those limitations and standards are incorporated into permits issued under section 402 of the Act.

Id. (Emphasis added).

¶81 Consequently, in determining whether Step 1 is met, we need not determine whether Shaft 10 is in the form of a mine because, as a category, ore mining—and copper mining, specifically—is regulated. *See* 40 C.F.R. § 400.100. The construction in question is of a building, structure, facility, or installation that will discharge pollutants. The "construction commenced" because Shaft 10 was constructed and ancillary changes were made from 2014 onward. Finally, the "construction commenced" after the new source date for ore mining—December 3, 1982. *See* 2006 Memorandum, Appendix B ("Ore Mining and Dressing"). Thus, I answer Step 1 in the affirmative; Shaft 10 meets the definition of a "new source" as described in Section 122.2.

¶82 ADEQ and the mine argue that because the mining site as a whole has existed since 1912, unless there is an independently applicable NSPS to a mining "shaft" rather than a mining "site" or "mine," there cannot be a new source from the construction of Shaft 10. I believe this point is neither correct nor necessary for our purposes. *See supra* ¶¶ 37-48; *see also* 49 Fed. Reg. 37,998, 38,043-44. But rather than use this rule for its intended purpose and then look to Step 2 to narrow an otherwise broad definition, the parties, and the majority in turn, begin their test by combining parts of 122.2 and 122.29(b)(2) and muddling the purpose of both. The appropriate focus, as Step 2 provides, is not on abstract definitions of "mine" but on an inquiry into whether the construction is "substantially independent of an existing source at the site." 40 C.F.R. § 122.29(b)(1)(iii).

¶83 I believe that Step 1 is met and proceed to Step 2. Step 2 asks whether the construction meets a more narrow new source definition pursuant to Section 122.29(b)(1). I agree with the majority that (b)(1)(i) and (b)(1)(ii) do not apply here, *see supra* ¶¶ 52-56, and thus proceed to (b)(1)(iii).

¶84 Section 122.29(b)(1)(iii), or Step 2(c) in my framework, provides that a construction meets the definition of a new source if "[i]ts processes are substantially independent of an existing source at the same site." ADEQ must consider a minimum of two factors in making this determination: (1) "the extent to which the new facility is integrated with the existing plant," and (2) "the extent to which the new facility is engaged in the same general type of activity as the existing source." *Id.* A construction is not a new source if it merely *could* operate substantially independently, unless, in fact, it actually does. 49 Fed. Reg. 37,998, 38,044 (rejecting a test based on whether a facility could operate substantially independently).

¶85 I would find on de novo review that Shaft 10 is not substantially independent from the existing source. Shaft 10 is "new construction but less than total replacement at existing facilities," *i.e.*, not a new source. *Id.* at 38,043.

¶86 As to factor (1), I would first consider Shaft 10's integration with the existing facilities. The primary means of integration the majority has considered are the Never Sweat Tunnel and Shaft 9, which dewater and ventilate Shaft 10. Dewatering and ventilation are not mere "supplied utilities," but are essential to *and components of* the mining process itself that are not analogous to the list of utilities the EPA states are insufficient for an integration finding. As a former miner and Arizona Mining Reform Coalition advocate testified before the ALJ, dewatering is "essential to underground operations" because without it the water content of the surrounding earth would flood drilled tunnels. The use of Shaft 9, the Never Sweat Tunnel, and Shaft 10 for interlocking systems of ventilation and drainage are not mere utilities (nor are they in any sense "supplied" in the sense that electricity or cooling water are) but are part of the mining process itself and essential physical features of the mine structure.

¶87 I note that even if dewatering and ventilation are mere utilities, the EPA has stated that these connections by themselves are insufficient for a finding that a construction is a new source, not that they cannot be considered as part of such a finding. *See* 49 Fed. Reg. 37,998, 38,043-44. Even assuming these are utilities, they nonetheless support a finding of the substantial integration of Shafts 9 and 10.

¶88 Shaft 8 also assists in draining groundwater from Shafts 9 and 10, pumping the water through the Never Sweat Tunnel. Further, the mine plans to add additional tunnels for conveying ore to the West Plant Site, including a tunnel for that purpose planned for construction at a depth

similar to the Never Sweat Tunnel that would connect directly to Shaft 10. Shaft 9 is also likely to be used for extraction of water itself, as well as development rock. Physically, in addition to the Never Sweat Tunnel, various drill holes connect Shafts 9 and 10, conveying water from Shaft 9 to Shaft 10.

¶89 Looking at the industrial system as a whole, it is apparent that—whether or not Shaft 10 *could* function independently—it does not. Shaft 10 is designed to be fully integrated into the mining process, physically attached to Shaft 9 by lateral tunnels and the Never Sweat Tunnel, as well as to the West Plant Site by a tunnel yet to be constructed. In other words, there is little independent about the construction, and I would find that it does not meet the first half of the (b)(1)(iii), or Step 2(c) test, the extent to which the new facility is integrated with the existing plant.

¶90 The EPA provides clarifying scenarios for the second half of the test in (b)(1)(iii)—whether "the construction results in the facilities or processes that are engaged in the same general type of activity as the existing source." 49 Fed. Reg. 37,998, 38,044; 40 C.F.R. § 122.29(b)(1)(iii). In the first scenario, if a plant begins to produce a new product that is very similar to the product currently being produced, it "would likely be considered an existing source." 49 Fed. Reg. 37,998, 38,044. But if a plant producing a final product in an industrial process adds new equipment to produce raw materials for that product, it would likely be considered a new source. *Id.* A second analogy concerns whether the construction "replicates, without replacing" the existing source. *Id.* The regulations give the example of opening the second of two power plants at the same site and concludes the second is a new source. *Id.* But there is no similar replication here. The Magma deposits are exhausted. It is not possible to open a second "factory" when the first is largely shuttered. There is no evidence suggesting why a mere change in mining technique should be determinative as to whether or not the "same general type of activity" is occurring. 40 C.F.R. § 122.29(b)(1)(iii). The function of the source is still the same—copper mining. Consequently, I would find that in weighing the two factors that the EPA has expressly required ADEQ to consider, Shaft 10 is not substantially independent and, therefore, cannot be considered a new source.

¶91 Thus, I would not reach Step 3 of the new source framework I outlined, which would require us to determine whether Shaft 10 is a new source or a new discharge. Such a consideration is unnecessary because Shaft 10, as a construction, is part of an existing source.

¶92 The majority concludes differently for a few reasons, the first being that Shaft 10 is at least 300 feet away from Shaft 9. In this fact-specific inquiry, Shaft 9 is physically connected across those 300 feet with drill holes that drain water into Shaft 10 for pumping. In this context, 300 feet of separation means little when the physical architecture is nonetheless connected, and the site as a whole relies on interconnected mechanisms for ventilation and dewatering. Further, the Never Sweat Tunnel itself, connecting Shaft 9 and the West Plant Site, is roughly 10,000 feet in length. The scale of the mine's architecture dwarfs the distance between the two shafts. Shaft 10 is merely one component of a revised industrial process—the start of the copper mining process that is continued at various plant sites.

¶93 Second, the majority suggests that Resolution has "'replicated' the [West Plant Site]" by constructing Shaft 10. *Supra* ¶ 59. In so doing, the majority suggests that the sheer volume of copper supply expected of Shaft 10 is relevant. This is at odds with EPA guidance which provides "if a facility increases capacity merely by adding additional equipment in one or two production steps to remove a 'bottleneck'" it is not a new source. 49 Fed. Reg. 37,998, 38,044. I also disagree with the majority that the cost of construction or future plans for Shaft 9 weigh in favor of finding Shaft 10 substantially independent. *See supra* ¶¶ 56-60. In my view, the former matters little and the latter demonstrates integration all the more. If the majority means to suggest that the cost somehow demonstrates that Resolution could have installed better equipment, I disagree. Facts such as where filtration equipment is installed in the dewatering or pumping process as installed in Shaft 10, or whether the technology has greatly changed since the last permit are not before us, and we therefore cannot make such a judgment even on de novo review.

¶94 Nor do I make much, as the majority does, of the change in mining technique from adits and tunnels to panel caving. *Supra* ¶ 59. The regulations do not distinguish between existing and new sources by way of method, and I cannot find anything in the record that would allow us to make such a determination on de novo review.

¶95 The EPA guidance states that "if a power company builds a new, but identical and completely separate power generation unit at the site of a similar existing unit, the new unit will be a new source." 49 Fed. Reg. 37,998, 38,044. Accordingly, the majority makes much of Resolution's goal of mining a new orebody. But as was testified to before the ALJ in this case, "[a] mine is constantly constructing . . . [t]hat's the nature of a mine." A mine is always "blasting, moving, or blasting more" and while ADEQ

applied this fact to the wrong component of the analysis (*i.e.*, Step 1) it is relevant to my determination of Step 2: digging a new shaft to pursue more ore is not replication or duplication. *See* 49 Fed. Reg. 37,998, 38,044. Instead, it is the continuation of an industrial process as an existing source, or at most an expansion of capacity as permitted without the finding of a new source. *See id.*

¶96 Again, to be fair to the majority, the EPA's list of analogies from 1984 is underinclusive. *See* 49 Fed. Reg. 37,998, 38,043-44. When dealing with complex industrial systems, looking for tidy analogies to only a smattering of categories such as "factory" or "power plant" is not always helpful. And if we and the parties are left asking ourselves (as we did at oral argument) "just how is a mine like a dentist's office," one might reasonably question the usefulness of analogies at all. Nonetheless, to the extent these analogies are persuasive, they point to Shaft 10 being a component of a larger existing industrial process, not an independent construction.

¶97 Whatever a decision to mine another nearby ore body is, it is certainly not akin to opening a new power plant. The product of a mine is ore. It is necessary to move earth to get it and thus a mine will be continually constructing by adits and tunnels or otherwise. A mine by its nature will—as Resolution's senior manager of Environment Permitting and Approvals testified before the ALJ—"chas[e] the vein" as Magma did for decades, moving from west to east "in search of new orebodies." Shaft 10 is more of the same.

¶98 The ore itself is a necessary input for this industrial process and is a substantially similar input as that which Magma sought prior to the construction of Shaft 10. Shaft 10 is not a full replacement of the facilities already present, as it relies heavily on Shaft 9, the Never Sweat Tunnel, and the panoply of facilities at the site to perform its function. Its mechanisms rely on, and in turn, support through Shaft 9, in dewatering and ventilation. Both processes are essential to ore mining and are not mere "utilities" ancillary to the process. *See* 49 Fed. Reg. 37,998, 38,043. It is in the nature of the mine as it existed before Shaft 10 to pursue ore and therefore Shaft 10 is not substantially independent.

¶99 In short, I find that Shaft 10 is not a new source that would require ADEQ to issue TMDLs before permitting discharge from Shaft 10. Because we must affirm an agency's decision "if there is substantial evidence in support thereof, and the action taken by the agency is within the range of permissible agency dispositions authorized by the governing

statute," I would affirm the ruling of the superior court notwithstanding the fact it, and ADEQ, performed the new source analysis incorrectly. *Holcomb v. Ariz. Dep't of Real Estate*, 247 Ariz. 439, 446, ¶ 26 (App. 2019).

¶100 I respectfully dissent.

AMY M. WOOD • Clerk of the Court
FILED: AA