MONTANA EIGHTEENTH JUDICIAL DISTRICT COURT, GALLATIN COUNTY

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UPPER MISSOURI WATERKEEPER, Plaintiff, vs. MONTANA DEPARTMENT OF EVIRONMENTAL QUALITY, an agency of the State of Montana Defendant.	No. DV-16-2023-262 ORDER ON PARTIES' CROSS MOTIONS FOR SUMMARY JUDGMENT

BEFORE THE COURT are the parties' cross motions for summary judgment.

BACKGROUND

This case addresses DEQ's 2023 approval of subsurface septic systems for Phase I of The Quarry Subdivision in Big Sky (the "project").

Waterkeeper contests the lawfulness of the approval under applicable environmental protection laws.

DEQ argues its approval was lawful.

The development site currently contains an open cut gravel pit.

The project is located approximately a quarter mile west of the Gallatin River and along the west side of Highway 191 and south of the Lone Peak Trail (MT-64) cutoff road to the Big Sky Village and Big Sky ski Area.

In March 2022, Waterkeeper and various other citizen groups filed a petition with DEQ requesting an assessment of "the middle segment of the Gallatin River (from the Yellowstone National Park boundary to Spanish Creek) to determine if recurrent algal blooms on the river required listing as impaired water under Section 303(d) of the Clean Water Act, 33 U.S.C. § 1313(d)." (DEQ'S Cross-Motion for Summary Judgment (CMSJ), pp. 2-3)

DEQ reviewed the petition and "determined that there was not overwhelming evidence of impairment by nutrients and that severe effects of eutrophication and algae were not present." (DEQ's CMSJ at p.3)

However, "the agency concluded that there was excessive algal growth that was occurring at levels that were beginning to affect aquatic life and recreation." (DEQ's CMSJ at p. 3)

"[T]he scientific evidence did not support listing the river as impaired for nitrogen or phosphorus, since the nutrients were within the strict, protective standards of DEQ-12A." (DEQ's CMSJ at p. 3)

In June 2022, DEQ issued "a notice of intent to list the river as impaired for algae, but not for nutrients." (DEQ's CMSJ at p. 3)

During the same period, DEQ reviewed an application for Phase I of the project, "a new major subdivision reliant on subsurface septic wastewater disposal located approximately ¼ mile from the Gallatin River, in the Canyon Area of Big Sky, MT." (Waterkeeper's Motion for Summary Judgment (MSJ) at p. 1)

The application proposed eight (8) new high-density residential lots which "would have their own Level II wastewater treatment and disposal system, capable of discharging at or below 7.5 mg/L nitrogen to groundwater." (Waterkeeper's MSJ at p. 1)

"DEQ's subdivision section reviewed the Quarry application and received comments about the preliminary impairment listing." (DEQ's CMSJ at p. 3)

In DEQ's response,

> [T]he agency explained that the river was continuing to meet all water quality standards for nutrients, so it was unclear what was causing the algal blooms, but the agency was continuing to study the algae and all causal conditions that may influence excess algae in that segment of the river.

(DEQ's CMSJ at p. 3).

On December 8, 2022, DEQ issued an Environmental Assessment, Nonsignificance Finding, and Narrative "for public comment" after evaluating Quarry's wastewater discharges, "which found the Quarry's new nutrient pollution discharges 'nonsignificant.'" (DEQ's CMSJ at p. 2).

Waterkeeper and other citizen groups made public comments opposing the Quarry subdivision largely due to claims of "reasonably foreseeable negative impacts from adding new sources of nutrient pollution to the Gallatin River system despite ongoing seasonal algal blooms in surface water, the growth-inducing nature of wastewater pollution to algal blooms, and a preliminary Gallatin impairment determination for nuisance algal blooms." (DEQ's CMSJ at p. 2).

On February 16, 2023, DEQ approved Phase I of the application to use eight (8) new Level II septic systems for the eight (8) residential lots.

On March 17, 2023, Waterkeeper filed its lawsuit challenging DEQ's decision-making process approving the Quarry's wastewater discharges under the Montana Water Quality Act (WQA), Montana Environmental Policy Act (MEPA) and the Montana Administrative Procedures Act (MAPA) (Waterkeeper's MSJ at p. 3).

In April 2023, DEQ issued a "final listing for the Gallatin River as impaired for algae." (DEQ's CMSJ at p. 3).

DEQ pointed out "the numeric nutrient standards in DEQ-12A had not been exceeded." (DEQ's CMSJ at p. 3).

DEQ did not want to list the river's nutrients at the time because DEQ "would investigate the possible causes of algal blooms, including nutrients, stream channel structure, turbidity/light penetration, stream shading, and temperature." (DEQ's CMSJ at pp. 3-4).

DEQ expected their investigation "may take two to six years to complete the development of the TMDL [i.e., total maximum daily load] for the river" stating:

> There is no doubt that the Gallatin River has suffered from algal blooms, which is why the agency listed the river as impaired for algae. However, the river is meeting all applicable numeric nutrient water quality standards (DEQ-12A), which were adopted based upon a large body of scientific work to ensure protection of the river. Should DEQ's data collection activities demonstrate that the numeric nutrient criteria in DEQ-12A are not protective enough to protect beneficial uses, a separate rulemaking process would have to be undertaken before DEQ could implement any changes or additional regulatory requirements

(DEQ's CMSJ at p. 4)

Waterkeeper's motion requests summary declaratory judgments determining that DEQ's February 16, 2023 approval of the project was unlawful, arbitrary and capricious in violation of applicable provisions of the Administrative Rules of Montana (ARM); that DEQ's reliance on its Nondegradation Guidance (Guidance) violated the rulemaking requirements of the Montana Administrative Procedures Act (MAPA); and that employment of the Guidance's metrics violates the requirements of the WQA.

Waterkeeper also seeks judgment voiding DEQ's approval consistent with the above declarative determinations.

DEQ opposes Waterkeeper's motion and urges the Court to grant its cross motion for summary judgment determining that its approval of Phase I was lawful in all respects.

LEGAL STANDARD

A party against whom relief is sought may move, with or without supporting affidavits, for summary judgment on all or part of a claim. Rule 56(b), M.R.Civ.P. The judgment sought through such motion should be rendered if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the defending party is entitled to judgment as a matter of law. Rule 56(c), M.R.Civ.P.

This case does not stem from a contested case proceeding under the Montana Administrative Procedures Act (MAPA). Rather, these are cross-motions for summary judgment addressed to the permitting decision made by DEQ as to the project.

Both parties argue that they are entitled to summary judgment as a matter of law and based on uncontested facts in the administrative record (AR).

The right to a "clean and healthful environment is a fundamental right under the Montana Constitution." *Held v. State,* 2024 MT 312:

> Under [the Montana Environmental Policy Act], agencies must 'take a hard look' at environmental impacts of contemplated agency actions. A more detailed evaluation is required of actions that will significantly affect the human environment compared to those that do not. Environmental assessments must include an evaluation of cumulative and secondary impacts that have a "reasonably close causal relationship" between the triggering state action and the subject environmental effect including 'the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type' and 'a further impact to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action'

Held, ¶ 62 citing *Bitterrooters for Planning, Inc. v. DEQ,* 2017 MT 222, ¶¶ 17;21-22; *Park Cty. Envtl. Council v. DEQ*, 2020 MT 303, ¶¶ 31-32; and ARM 17.4.603(7), (18); and 609(3)(d)-(e).

It is the public policy of Montana to:

> (1) conserve water by protecting, maintaining, and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses;
> (2) provide a comprehensive program for the prevention, abatement, and control of water pollution; and
> (3) balance the inalienable rights to pursue life's basic necessities and possess and use property in lawful ways with the policy of preventing, abating, and controlling water pollution in implementing the program referred to in subsection (2).

MCA 75-5-101.

In assessing departmental approval of a developer's application for a permit, the district court's legal analysis focuses on: (1) whether a decision is unlawful; or (2) whether it is arbitrary and capricious. *N. Fork Preservation Ass'n v. Dep't of State Lands*, 238 Mont. 451, 459, 778 P.2d 862, 867 (1989).

An agency must provide a satisfactory explanation for its action and a reviewing court will "defer to consistent, rational, and well-supported agency decision-making." *Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality*, 2019 MT 213, ¶26.

When making an inquiry to determine if the agency decision was arbitrary or capricious, the court must consider whether the "decision was based upon a consideration of the relevant factors and whether there has been a clear error of judgment." *N. Fork Preservation Ass'n,* 238 Mont. at 465, 778 P.2d at 871 (quoting *Citizens to Preserve Overton Park v. Volpe,* 401 U.S. 402, 416, 91 S.Ct. 814, 823, 28 L.Ed.2d 136 (1971)). While the inquiry must be thorough, "the

ultimate standard of review is a narrow one," and a court may not substitute its judgment for that of the agency "by determining whether its decision was 'correct.'" *N. Fork Preservation Ass'n,* 238 Mont. at 465, 778 P.2d at 871.

The court will examine an agency's decision to determine if it was made upon sufficient information, or if the decision is "so at odds with the information gathered that it could be characterized as arbitrary or the product of caprice." *Clark Fork Coalition v. Mont. Dep't of Envtl. Quality,* 2008 MT 407, ¶ 27 (citing *N. Fork Preservation Ass'n,* 238 Mont. at 465, 778 P.2d at 871).

In terms of a "hard look" assessment, ARM 17.30.715(1) and (2) set forth the criteria for assessing nonsignificant impact on water quality:

> (1) The following criteria will be used to determine whether certain activities or classes of activities will result in nonsignificant changes in existing water quality due to their low potential to affect human health or the environment. These criteria consider the quantity and strength of the pollutant, the length of time the changes will occur, and the character of the pollutant. Except as provided in (2), changes in existing surface or ground water quality resulting from the activities that meet all the criteria listed below are nonsignificant, and are not required to undergo review under 75-5-303, MCA:
>
> (a) activities that would increase or decrease the mean monthly flow of a surface water by less than 15% or the 7- day 10 year low flow by less than 10%;
>
> (b) discharges containing carcinogenic parameters or parameters with a bioconcentration factor greater than 300 at concentrations less than or equal to the concentrations of those parameters in the receiving water;
>
> (c) discharges containing toxic parameters, inorganic nitrogen, or inorganic phosphorus, except as specified in (1)(d) and (e), which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7. Whenever the change exceeds the trigger value, the change is not significant if the resulting concentration outside of a mixing zone designated by the department does not exceed 15% of the lowest applicable standard;
>
> (d) changes in the concentration of nitrate in ground water which will not cause degradation of surface water if the sum of the predicted concentrations of nitrate

at the boundary of any applicable mixing zone will not exceed the following values:

. . . .

(iii) 7.5 mg/L for domestic sewage effluent discharged from a wastewater treatment system using level 2, as defined in ARM 17.30.702; or

. . . .

(e) changes in concentration of total inorganic phosphorus in ground water if water quality protection practices approved by the department have been fully implemented and if an evaluation of the phosphorus adsorptive capacity of the soils in the area of the activity indicates that phosphorus will be removed for a period of 50 years prior to a discharge to any surface waters;

(f) changes in the quality of water for any harmful parameter, nutrients listed at ARM 17.30.631, and parameters listed in Department Circular DEQ-12A, for which water quality standards have been adopted other than carcinogenic, bioconcentrating, or toxic parameters, in either surface or ground water, if the changes outside of a mixing zone designated by the department are less than 10% of the applicable standard and the existing water quality level is less than 40% of the standard;

(g) for nutrients in domestic sewage effluent discharged from a wastewater treatment system that does not require an MPDES or MGWPCS permit, except as specified in (1)(d) and (e), which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7; and

(h) changes in the quality of water for any parameter for which there are only narrative water quality standards if the changes will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity.

(2) Notwithstanding compliance with the criteria of (1), the department may determine that the change in water quality resulting from an activity which meets the criteria in (1) is degradation based upon the following:

(a) cumulative impacts or synergistic effects;

(b) secondary byproducts of decomposition or chemical transformation;

(c) substantive information derived from public input;

(d) changes in flow;

(e) changes in the loading of parameters;

(f) new information regarding the effects of a parameter; or

(g) any other information deemed relevant by the department and that relates to the criteria in (1).

ARM 17.30.715(1) and (2)

> Where the department has determined that the disposal of sewage from a proposed subdivision may adversely affect the quality of a lake or other state waters, the department may require additional information and data concerning such possible effects. Upon review of such information, the department may impose specific requirements for sewage treatment and disposal as are necessary and appropriate to assure compliance with the [WQA] Title 75, chapter 5, MCA , and water quality and non-degradation standards, ARM Title 17, chapter 30, subchapters 6 , 7, 10 and 12

ARM 17.36.124.

Where DEQ determines that a proposed activity will have a significant impact on high-quality waters, Montana has a "nondegradation policy" that prohibits the activity subject to feasibility allowances based on criteria that consider the necessity and importance of the project along with implementation of available protections. MCA 75-5-303.

DEQ exercises its regulatory functions pursuant to state law and the administrative rules it promulgates as authorized by state law.

MAPA defines a "rule" as "each agency regulation, standard, or statement of general applicability that implements, interprets, or prescribes law or policy or describes the organization, procedures, or practice requirements of an agency." MCA 2-4-102(11)(a).

MCA 2-4-302 sets forth notice and hearing requirements for adoption, amendment or repeal of any agency rule including "the time, place and manner in which interested persons may present their views on the proposed action." MCA 2-4-302(1)(b).

The district court may issue declaratory judgments. MCA 27-8-201.

The purpose of Montana's declaratory judgment provisions "is to settle and to afford relief from uncertainty and insecurity with respect to rights, status, and other legal relations." MCA 27-8-102.

"The court may refuse to render or enter a declaratory judgment or decree where such judgment or decree, if rendered or entered, would not terminate the uncertainty or controversy giving rise to the proceedings." MCA 27-8-206.

THE ADMINISTRATIVE RECORD

DEQ issued the Preliminary Plat Approval for the Phase I of the project on February 16, 2023. (AR00001-00005).

The development site currently contains a DEQ permitted open cut gravel pit. (AR02053)

The Project Manual in support of the developer's application for DEQ approval, prepared by Genesis Engineering, Inc., was over 2,000 pages. (AR00006-02043). The manual includes details for the sewage treatment infrastructure, capacities, dimensions, soil types and analysis, flow assessments, and drainfield breakthrough to surface water analysis for select chemicals among other details.

DEQ's Environmental Analysis (EA) notes that each of the eight (8) lots in Phase I would have a Level II wastewater treatment facility capable of discharging wastewater at or below 7.5 mg/L of nitrogen (the level specified for nonsignificance in MCA 75-5-301(5)(d)). (AR02052).

The EA addresses cumulative impacts, the county PUD's consideration of them; and application of the DEQ's 2015 Guidance to exempt the project from further analysis::

> The entire Quarry project has previously obtained zoning, planning, and platting approvals for its planned unit development from Gallatin County. As required by the Gallatin County PUD approval, which includes the future phases, the applicant proposes using SepticNet technology to treat wastewater to the Montana groundwater non significance criteria of 7.5 mg/L. The wastewater contributions from all phases were considered at the PUD public hearing before Gallatin County. That information showed a net computed nitrate change in the Gallatin River- when considering the trigger analysis by assuming all the treated effluent from the entire PUD entered the Gallatin River-was non significant. Accordingly, the department does not anticipate significant cumulative nitrate impacts from future phases of the subdivision.
>
> . . . .
>
> With regard to consideration of the cumulative impacts in groundwater for purposes of the department's non significance determination under the Water Quality Act, discharges from a septic system using Level 2 treatment with a nitrate concentration of 7.5 mg/L at the end of a mixing zone are nonsignificant under ARM 17.30.715(1)(d)(iii). The SepticNet treatment system proposed for the subdivision has been approved by the department as a Level 2 treatment system that discharges a nitrate concentration at or below 7.5 mg/L. With the discharge concentration of the proposed wastewater systems at or below the significance limit, an evaluation of the cumulative impacts of the SepticNet systems to nitrate concentrations in groundwater could not mathematically exceed the concentration identified as a significant degradation.
>
> That water is hydrologically connected does not necessarily mean that a discharge will cause degradation, as pollutants will diffuse, dilute, and attenuate as they travel through groundwater. The department has developed a guidance manual titled 'How to Perform a Nondegradation Analysis for Subsurface Wastewater Treatment Systems (SWTS) Under the Subdivision Review Process- October 2015' ("Nondegradation Guidance") that outlines the requirements for consideration of a facility's impacts to surface water based on site- specific soil textures and the distance to the nearest downgradient receiving high quality surface water. The threshold distances in the nondegradation guidance provide a conservative classification criterion based on these considerations. Here, based on the proposed drain field location more than 1/4 mile from the closest downgradient high quality surface water and site- specific soil characteristics, an analysis of the individual, aggregate, or cumulative impacts to surface water was not necessary pursuant to chapter 5 of the Nondegradation Guidance.

(AR02065-02066)

Per Genesis Engineering's Non-degradation Analysis, "[n]o non degradation nitrate analysis is required with the use of the Level 2 Septic Net treatment system." (AR04981).

The EA includes a DEQ Subdivision Significance Determination Checklist which acknowledges, under ARM 17.30.701(1) and MCA 75-5-103(9), that high quality waters will be affected by the development and, under ARM 17.30.702(16) and 17.30.705(1), the development will be the source of new or increased pollutants.

(AR02071)

In addressing the absence of a need for a mitigating mixing zone, the EA states

> Wastewater treatment systems used are SepticNet systems that treat nitrogen to 7.5 mg/L, which is the nondegradation groundwater limit. Therefore, groundwater mixing zones are not required although a well setback envelope is required per the Septic Net Level 2 approval. The well setback envelope is the same size and shape as a 500 foot standard groundwater mixing zone. Those setbacks are shown on figure LL-1 (dated 11/15/22) and confirm there are no existing/approved wells within 100 feet of the well setback envelope
>
> (AR020271)

The Checklist addresses all eight (8) of the ARM 17.30.715(1) significance determination criteria.

The EA specifically notes that the DEQ's nondegradation standards under its 2015 Guidance was used to conclude that it did not have to address the trigger value for increased toxics or nutrients (per ARM 17.30.715(1)(e)) because the development's drainfields are to be located at least a ¼ mile from the Gallatin River. (AR02072)

With respect to subsection (1)(e), the checklist also notes that the phosphorous breakthrough calculation for the drainfields exceeded the 50 year limit for drainfield absorption capacity as required by ARM 17.30.715(1)(e). (AR02072)

This is consistent with DEQ's Phosphorous Breakthrough Analysis which showed breakthrough to surface water in the hundreds of years for all the drainfields. (AR05056-05086).

DEQ's EA provided "NO" responses but no notes to justify them as to 17.30.715(1)(a) (addressing changes to mean monthly flow of surface waters); (1)(b) (looking at concentrations or bioconcentration factor (BCF) measurements between discharge and receiving water); (1)(d) (addressing excessive increases in nitrate-nitrogen in groundwater at a mixing zone boundary); (1)(f) (referring to excessive increases in harmful parameters for existing water quality); and (1)(g) (addressed to measurable effects on beneficial uses or measurable changes in aquatic life or ecological integrity). (AR02071-02072)

The EA also includes a list of public comments and DEQ's responses.

The responses include some recurrent themes addressed how DEQ determined that the development would not significantly impact the water quality of the Gallatin River.

These include public concerns addressed to the cumulative impact of the project and DEQ's references to the "updated . . . Cumulative Effects Section of the Final EA" (AR02073); the practice of 'segmentation' or obtaining department approvals in piecemeal fashion and DEQ's denial of this practice with reference to its updated cumulative effects analysis; nitrate concentrations in discharged wastewater and its impact on the Gallatin River and algal blooms in particular and DEQ's assertion that the project's SepticNet system ("best available technology" (BAT)) for effluent treatment involving smaller wastewater systems" (AR02096)) is a Level 2 system that treats nitrogen levels to 7.5 mg/L (the nondegradation limit)(see, e.g.,

Comment/Response #36 at AR02081); degradation of the Gallatin River and DEQ's refutation of this possibility based on a cumulative discharge of 22,500 gallons per day, treatment of nitrogen to 7.5 mg/L, and "subsequent dilution with groundwater within the 500-foot-long setback envelope required for each drainfield" ((AR02043); high groundwater levels and DEQ's determination that "site-specific data show that the depth of groundwater beneath the drainfield locations ranged from 30 to 66 feet below ground surface" (AR02077); and soils and geology and DEQ's determination that the soil test pits for each proposed drainfield showed that "[a]ll soil types are acceptable for drainfield discharges at the appropriate application rate per department circular DEQ-4" (AR02078).

Circular DEQ-4, Montana Standards for Subsurface Water Treatment Systems mandates minimum standards for the size, design and construction of subsurface systems pursuant to the Montana Code Annotated and the Administrative Rules of Montana including the Montana Water Quality Act and DEQ's Nondegradation Rules. (AR03456-03416).

Per the DEQ,

> All soil types [at the project] are acceptable for drainfield discharges at the appropriate application rate per department circular DEQ-4. For reference, the range of application in DEQ-4 (Table 2.1-1) are from 0.15 to 0.8 gallons per day/square feet
>
> (AR02078).

In October 2015, DEQ published its guidance on "How to Perform a Nondegradation Analysis for Subsurface Wastewater Treatment Systems (SWTS) under the Subdivision Review Process" (2015 Guidance). (AR03685)

Per the Preamble, the publication is for guidance only and cannot be applied to contravene an applicable statute or administrative rule. (AR03688)

"THIS DOCUMENT IS INTENDED FOR USE AS A GUIDANCE DOCUMENT TO ASSISST [sic] APPLICANTS AND THEIR AGENTS TO PREPARE AND SUBMIT NON-SIGNIFICANCE APPLICATIONS TO THE REVIEWING AUTHORITY." (AR03688)

In the introduction, the guidance explains that the purpose of the nondegradation rules under ARM 17.30.715 "is to protect high quality state ground and surface waters." (AR03689)

It goes on:

> Because this guidance does not have the force of a design circular or rule, the requirements listed within the document may be varied from based on site- specific conditions or constraints. However, any changes from the requirements must be based on defensible reasons and agreed to by the reviewing authority. The terms "shall" and "should" are used throughout the document to distinguish between requirements that are more definite (shall) and those that might be varied from more commonly (should) under appropriate circumstances.

(AR03689)

The 2015 Guidance addresses the employment of mixing zones---defined in MCA 75-5-103(21)---which are areas where water quality standards may be exceeded to allow for complete mixing and even distribution with and through a specific body of ground or surface water. (AR03713).

The analysis and calculations for identifying the parameters of particular mixing zones are set forth in the 2015 Guidance with references to the MCA and ARM. (AR03713-03722).

For projects that are located adjacent to surface waters:

> Where the distance between the SWTS (i.e., subsurface wastewater treatment system) and the high quality state surface water is less than 1/4 mile, you must run the adjacent to state water analysis for impacts from nitrogen. If the distance between the SWTS and the high quality state surface water is greater than 1/2 mile then you do not need to run the adjacent to state waters analysis for impacts from nitrogen. But if the SWTS is greater than 1/4 mile and less than 1/2 mile, has a limiting layer less than 8 feet below the natural ground surface and the soil application rate as defined in Department Circular DEQ- 4 Chapter 2 is 0.4 gpd/ft²

> or more restrictive then the adjacent to state surface water analysis for nitrogen must be evaluated.
>
> (AR03731)

According to DEQ-4, Chapter 2 (Table 2.1.1), the applicable application rates ranged from 0.8 gpd/ft² to .15 gpd/ft² which correlate to percolation rates from an inch of water drop in a few minutes to an inch of water drop requiring over three (3) hours. (AR03474).

"The soil types and application rates [from the required tests at each drainfield] ranged from a silt (0.15 gallons per day/square feet) to a sandy loam (0.6 gallon per day/square feet)." (AR02080).

Based on the ¼ mile distance standard, DEQ's EA concluded that:

> based on the proposed drain field location more than 1/4 mile from the closest downgradient high quality surface water and site- specific soil characteristics, an analysis of the individual, aggregate, or cumulative impacts to surface water was not necessary pursuant to chapter 5 of the [2015 Guidance]
>
> (AR02066)

An earlier 2021 internal DEQ memo observed:

> [T]he nondegradation guideline indicates that for the application rate proposed for the drainfields, 0.3 gpd/ft², drainfields that are ¼ mile or more from the state waters do not need to conduct a trigger analysis. Howerver (sic), [the percolation tests] indicate the soils may have higher permeability than indicated by the soil descrptions (sic). Therefore, the Department will require trigger value analysis per ARM 17.30.715(1)(g) for any drainfield within ½ mile of an impacted state water based upon the results of the groundwater monitoring . . . . Note that if a drainfield exceeds the trigger value, the narrative standard (ARM 17.30.715(1)(h)) is also available to address the nondegradation requirements
>
> (AR05256).

On July 23, 2021, an internal DEQ email from supervisor Eric Regensburger to Jenny Warran stated:

> The perc tests they ran in August 2020 show much faster perc rates (14 out of 18 are less than 6 min/inch) than their soil descriptions indicated. I think that the gravel in the soil profiles is more controlling than the sandy or silty loam matrix. What application rates are you using for the drainfields, the perc rates or the soil profiles? For purposes of drainfield sizing using the soil descriptions is (sic) more conservative, but for the phosphorous breakthrough using the perc tests would be more conservative.
>
> (AR05263).

According to Genesis Engineering's Water and Wastewater Design Report for the project, ""[u]sing DEQ-4 Table 8-1, an application rate of 0.3 gpd/ft² based on soil classifications and percolation tests were used to size the drainfields." (AR04337)

This was also the application rate used to determine the size of the septic and doping tanks. (AR04339-04362)

Internal correspondence corroborated that DEQ's determination showed application rates that ranged from .15 gpd/ft2 to 0.6 gpd/ft2. (AR04638-04639)

According to Genesis Engineering's Water and Wastewater Design Report "an application rate of 0.3 gpd/ft² based on soil classifications and percolation tests was used to size the drainfields." (AR04780). See also Drainfield Sizing Worksheet[s] (AR04965-04972).

Per Genesis Engineering's Non-degradation analysis, "[no] non-degradation nitrate analysis is required with the use of the Level 2 Septic Net treatment system."

In a 2019 email message, Ashley Kroon, and environmental engineer at DEQ told Genesis' Chris Wasia ""if the soils correspond to an application rate of 0.4/ft² or slower, all drainfileds must be more than ¼ mile from surface water for an adjacent surface water analysis not to apply." (AR06660)

In 2018, Genesis Engineering hired Rawhide Engineering Inc. to prepare a Preliminary Geotechnical Investigation Report for the proposed project site.

In its December 17, 2018 report, Rawhide observed that "[g]roundwater was encountered in the quarry at depths ranging from 6.3 to 8.0 feet below existing site grades during our exploration in September 2018." (AR06305)

"Groundwater may fluctuate due to irrigation and precipitation during the year." (AR06306)

ANALYSIS

At the outset, the Court disagrees with Waterkeeper's contention that DEQ's 2015 Guidance constitutes unlawful rulemaking.

The Guidance was relied on by the DEQ as just that---guidance.

While it is true that the 2015 Guidance 'requires' that deviations from its 'requirements' be defensible, the undisputed fact remains that it is subject to and controlled by actual rules and regulations.

An agency "is not required to go through MAPA rulemaking procedures to exercise . . . statutorily granted discretion." *Mont. Independent Living Project v. DOT,* 2019 MT 298, ¶ 35 citing *McGree Corp. v. Montana P.S.C.,* 2019 MT 75, ¶ 35.

Here, DEQ's non significance determination was based on its application of applicable statutes, administrative rules, and DEQ circulars.

While DEQ's decision not to conduct further analysis of the project's cumulative impact or synergistic effect for nitrogen was in accordance with the 2015 Guidance, the guidance was

non-binding and incorporated standards such as soil types, application rates, nitrogen levels and hard look criteria from established statutes, rules and regulations.

The Court also disagrees with Waterkeeper's assertion that DEQ violated Montana's nondegradation policy. That would presuppose that the project will have a not insignificant impact on the Gallatin River.

The Court does not reach those conclusions here.

The degradation here is potential degradation and the Court does not conclude that, at this juncture, that DEQ must seek leave to degrade in accordance with Montana's nondegradation policy.

The issue for the Court is that having decided to employ the 2015 Guidance, DEQ did not demonstrate, through the administrative record, a reasonable basis for exemption itself from conducting further analysis of the project's possible cumulative impact or synergistic effect on the Gallatin River.

Rather, DEQ conclueded that:

> [B]ased on the proposed drain field location more than 1/4 mile from the closest downgradient high quality surface water and site- specific soil characteristics, an analysis of the individual, aggregate, or cumulative impacts to surface water was not necessary pursuant to chapter 5 of the [2015 Guidance}
>
> (AR02065-2066)

Notably, the absence of an 'adjacent surface waters' assessment informs the "No' responses (without explanatory notes) for ARM 17.30.71(1)(b) (looking at concentrations or bioconcentration factor (BCF) measurements between discharge and receiving water); (1)(d) (addressing excessive increases in nitrate-nitrogen in groundwater at a mixing zone boundary); (1)(f) (referring to excessive increases in harmful parameters for existing water quality); and (1)(g)

(addressed to measurable effects on beneficial uses or measurable changes in aquatic life or ecological integrity).

This is because answering those 17.30.715(1) criteria would require the evaluation for adjacent surface waters described in the 2015 Guidance.

Rather, DEQ's reasoning is both circular and self-contradictory: DEQ determined that the project will not significantly impact the river---but its guidance dictates that it is not required to demonstrate, in cumulative or synergistic terms, why it will not do so--- all because the project will not significantly impact the river.

DEQ's 2015 Guidance describes an "adjacent to surface waters" assessment, which the project is, that requires "an analysis of the effects of the proposed sewage treatment system(s) on the quality of the downgradient high quality surface water in accordance with ARM 17.36.312." (See AR03731-03732).

There is no dispute that the Gallatin River is a high quality surface water or that it is an adjacent surface water that is downgradient to and hydrologically connected to the project.

ARM 17.36.312, since transferred to ARM 17.36.124(1), states:

> Where the department has determined that the disposal of sewage from a proposed subdivision may adversely affect the quality of a lake or other state waters, the department may require additional information and data concerning such possible effects. Upon review of such information, the department may impose specific requirements for sewage treatment and disposal as are necessary and appropriate to assure compliance with the water quality act, Title 75, chapter 5, MCA , and water quality and non-degradation standards, ARM Title 17, chapter 30, subchapters 6 , 7, 10 and 12 .

The 2015 Guidance DEQ further delineates the process for conducting trigger value analyses and applying the assumption "that 100 percent of the effluent load discharged" will reach the surface water. (AR03732)

The 2015 Guidance exempts further impact analysis where two (2) conditions are met: First, there is no limiting layer within eight (8) feet of the natural ground surface; and second, that the soil application rate as defined in DEQ-4, Chapter 2 is 0.4 gpd/ft² "or more restrictive."

While the AR makes numerous references to depth-to-groundwater levels at the project (which vary depending on specific location and/or year, season etc.), *there is no information or discussion addressed squarely to limiting layers or their relationship to conducting further analysis of the project's impact on the middle section of the Gallatin River for possible cumulative impact or synergistic effect of nitrogen.*

So that information is missing.

As to the second condition, DEQ fails to identify whether there is an application rate or rates addressed to the SWTSs that would, per the 2015 Guidance, exempt further nitrate impact analysis.

Per Table 2.1.1 in DEQ-4, more restrictive application rates for treated wastewater into a drainfield correlate to slower percolation rates in the receiving soil. (AR03474)

At the project, soil types were variable with DEQ-4 application rates ranging from 0.6 gpd/ft² to .15 gpd/ft². (AR02080).

This means there are soil types at the project that call for application rates both more and less restrictive than the 0.4 gpd/ft².

In fact, the soil types at the project cover nearly the entire range of permeability covered by the DEQ-4, Table 2.1.1.

DEQ, however, states throughout the administrative record that it is exempt from conducting an 'adjacent to surface waters' analysis under its 2015 Guidance.

While it is true that there are qualifying soil types at the project and that a rate (i.e. 0.3 gpd/ft²) was used to size the drainfields and dosing tanks at the project, DEQ never addresses why this application rate can be universally applied to all sites on the project for purposes of exempting itself from further evaluation of the impact of nitrogen entering the Gallatin River from the project.

The administrative record reflects site conditions with varying soil types, ground water depths that can change seasonally, and different outcomes for assessing soil conditions based on the test employed.

In the end, DEQ's relied on its 2015 Guidance for the position that the project was exempt from further analysis. But as just described, the applicability of the exemption provided for under the 2015 Guidance is not clear.

There were many soil tests conducted at the site. They revealed varying soil types, permeability and, per DEQ-4, application rates.

But it appears that DEQ applied a single application rate from DEQ-4, .3 gpd/ft², and, along with the ¼ mile or more distance from the Gallatin River, deemed the 2015 Guidance's exemption criteria satisfied.

DEQ references that the 2015 Guidance has been codified at MCA 75-5-301(5)(e) since the project's approval.

But this only underscores the importance of clearly and comprehensively addressing the distance, soil conditions and treatment level criteria in the guidance.

DEQ did not clearly and comprehensively address the requirement of its 2015 Guidance---or of the criteria referenced in MCA 75-5-301(5)(e).

The Court cannot conclude that the Department's nonsignificance determination and resulting approval of the project "was based upon a consideration of relevant factors" (*N. Fork Preservation Ass'n,* 238 Mont. at 465, 778 P.2d at 871 (quoting *Citizens to Preserve Overton Park v. Volpe,* 401 U.S. 402, 416, 91 S.Ct. 814, 823, 28 L.Ed.2d 136 (1971); or whether it was not "so at odds with the information gathered that it could be characterized as arbitrary or the product of caprice." *Clark Fork Coalition v. Mont. Dep't of Envtl. Quality,* 2008 MT 407, ¶ 27 (citing *N. Fork Preservation Ass'n,* 238 Mont. at 465, 778 P.2d at 871).

As described above, DEQ responded to public comment about the need for cumulative analysis by pointing out that its EA specifically addressed cumulative impact.

But it did so by reference to the 2015 Guidance and, again, without addressing how conditions on the ground satisfied the conditions for exemption in the guidance for further study of cumulative and synergistic impact.

At the same time, DEQ seems to argue it did a cumulative analysis---while at the same time acknowledging that it both needs one and is doing one. In fact, this curious reasoning was the very basis for its determination *not* to list the middle section of the Gallatin River as impaired for nutrients.

DEQ makes general references to the findings of its experts; the analysis of Micheal E. Nicklin Phd (actually a nine (9) page "letter" re "Support for Quarry Project in Big Sky") which included his "conservative assumptions"; and that "the agency's longstanding guidance did not require additional consideration of cumulative effects. (DEQ's Supporting Brief at pp. 14-16).

But the record does not set forth (nor does DEQ purport to set forth) the kind of evaluative process for cumulative effect that its own guidance required.

There are also references to the county's conclusion that the project would not significantly impact water quality even if assumed that all discharges from the district reached the Gallatin River.

The Court disagrees that DEQ can defer to PUD's determinations in this matter, especially since Gallatin County's approval of the project was conditioned up DEQ's own approval.

DEQ argues that it "completed its water quality analysis by evaluating existing surrounding development and nonsignificant impacts based on the activity under review." (DEQ's Reply Brief at p. 6, fn. 1).

The overriding justification for the experts' and county's determination that the project will not significantly impact the Gallatin River is the idea that any degradation can be mathematically eliminated because of the project's use of a Level II system that treats the water to the 7.5 mg/L nitrogen non-degradation level identified in DEQ-4.

The problem with this reasoning is that DEQ has acknowledged that it does not fully understand why the algal blooms in the Gallatin River are occurring and that it must investigate further:

> Should DEQ's data collection activities demonstrate that the numeric nutrient criteria in DEQ-12A are not protective enough to protect beneficial uses, a separate rulemaking process would have to be undertaken before DEQ could implement any changes or additional regulatory requirements

(DEQ's CMSJ at p. 4)

But "data collection activities" is the very process that the 2015 Guidance requires and ARM 17.36.124(1) anticipates.

Furthermore, given that DEQ's decision to designate the Gallatin River as impaired for algae (but not for nutrients) occurred in 2022, the data about nutrient levels and their contribution, or not, should be advanced now.

DEQ has already announced that it is studying whether nutrient trigger levels need readjustment to address algal blooms.

In this context, the timing of DEQ's approval, in addition to its failure to articulate compliance with the guidance it claims to be following, can only lead to the Court's conclusion that the approval was arbitrary and capricious.

"[DEQ] explain[s] that the river [continues] to meet all quality standards for nutrients [per the nutrient standards in DEQ Circular 12-A], so it was not clear what was causing the algal blooms . . . ." (DEQ's Support Brief at 3)

"The best available science shows that that the nutrient standards set for the Gallatin River are sufficient to protect against eutrophication and algal blooms in the Gallatin River." (DEQ's Support Brief at 5 citing AR03148).

Nonetheless, DEQ has determined that it would take up to six (6) years to complete the development of a total mass daily load (TMDL) for pollutants during which time it might be "demonstrate[d] that the numeric nutrient criteria in DEQ-12A are not protective enough to protect beneficial uses." (DEQ's Support Brief at 4)

But the larger picture is that DEQ approved a substantial project adjacent to the Gallatin River at the very time it has acknowledged that the river is impaired for algae and that it does not yet know whether current parameters for nutrients are contributing to eutrophication.

"Should DEQ's data collection activities demonstrate that the numeric nutrient criteria in DEQ-12A are not protective enough to protect beneficial uses, a separate rulemaking process

would have to be undertaken before DEQ could implement any changes or additional regulatory requirements." DEQ Ope. Brief at p. 4.

Under ARM 17.36.124, DEQ is authorized to "require additional information" where it has determined that a project "may adversely affect" state waters.

Here, the parties do not dispute that treated wastewater from the project will reach the Gallatin River and that the middle section is impaired for algal growth. DEQ has acknowledged that additional information is needed---a collection process that by DEQ's own estimates should be well along---but seeks the Court's ratification of DEQ's determinations without the benefit of the information it says it needs as to whether nutrients are contributing to eutrophication.

The timing of DEQ's approval is irrational in this context.

Ultimately, the parties agree this matter can be decided on the administrative record before the Court.

The Court need not rely on, and does not rely on, documents cited by Waterkeeper outside the administrative record.

The fact that DEQ disputes Waterkeeper's claims or characterizations, such as the Gallatin River being degraded or impaired for nutrients, does not address the shortcomings in DEQ's reasonings, determinations, and approval of the project

Rather, the Court finds, by clear and convincing evidence in the record, that DEQ failed to consider all relevant factors as required by its own guidance and that the timing of its approval, given the uncertainties about what was causing the middle section of Gallatin River to be impaired for algae, is devoid of rational judgment.

The contents of the AR do not support DEQ's determination that the project was nonsignificant as to its impact on the Gallatin River; and the timing of DEQ's approval of the

project relative to its determination that the middle section of the Gallatin River is impaired for algal blooms and that further study as to the contribution of nutrients to that impairment is required is inconsistent with the DEQ having taken the "hard look" required by Montana law.

The Court further concludes that the remedial purpose of Montana's Declaratory Judgment Act is served by making declarations addressed to the parties' respective claims because those declarations provide clarity and certainty as to the status of challenged actions both for the parties and others might rely on them.

The Court notes that Waterkeeper specifically requests that the Court 'void ab initio' DEQ's approval of the project---effectively 'vacating' it.

The Court believes that Waterkeeper's request is redundant---the Court need not declare as void from its inception an act that the Court has declared illegal.

DEQ had the authority to act on the application for project approval and to issue its nonsignificant decision and approve the application.

The declaratory relief provided by the Court's order provides clarification, direction and defines the status of DEQ's role in assessing the project. This is consistent with the purpose of the Uniform Declaratory Judgments Act.

The Court renders declaratory relief here because it addresses the illegality of DEQ's approval of the project and terminates any uncertainty about that.

This also provides the narrowly tailored remedy that MEPA requires---DEQ will need to remedy the deficits in its approval, including cumulative impact and synergistic effect assessments as to nitrogen from the project entering the impaired, middle section of the Gallatin River, if the project is to go forward.

Again, given the years that have already passed since DEQ's impairment decisions and approval of the project, it would appear that additional, required information may be accessible now or in the future.

As referenced earlier, the Court cannot conclude that DEQ violated Montana's nondegradation policy because there has not yet been, and may never be, a determination that the project will have a significant impact on the Gallatin River's water quality.

The existing nonsignificance finding is unlawfully flawed---but the Court does not assume that existing issues might not be remedied by DEQ.

The Court appreciates that the project is designed to provide affordable housing to a community reliant on worker who need affordable housing options.

But affordable housing relief is needed because Big Sky is a desirable recreational area characterized by natural beauty.

Protecting the water quality of the middle section of the Gallatin River is, of course, part of maintaining the area's draw and ensuring economic viability now and in the future.

ORDER

1. Summary judgment is GRANTED in DEQ's favor as to Waterkeeper's claim that employment of the 2015 Guidance violated MAPA or otherwise constituted unlawful rulemaking;
2. Summary judgment is GRANTED in DEQ's favor as to Waterkeeper's claim that DEQ violated the Montana WQA's nondegradation policy;
3. Summary judgement is GRANTED in Waterkeeper's favor as to its claim that DEQ's nonsignificance finding and approval of Phase I of the Quarry Project, including

DEQ's failure to further assess cumulative impacts or synergistic effects of the project on the Gallatin River and approving the project when the cause of the algal blooms and role of nutrients was uncertain and at a time when DEQ acknowledged the need for further study and data collection, was arbitrary, capricious and unlawful and in violation of the Montana Constitution, MEPA and the WQA; and the Court so determines and declares;

4. Summary judgment is GRANTED in Waterkeeper's favor as to its claim that DEQ unlawfully failed to take a "hard look" at water quality impacts of the Quarry Subdivision, including cumulative impacts, as required by the Montana WQA and ARM 17.30.715(1) and (2);
5. Summary judgment is DENIED as to Waterkeeper's request that the Court determine and declare that DEQ's nonsignifance finding and project approval be voided *ab initio;*
6. Any and all motions for summary judgment not expressly identified in this Order are DENIED; and
7. Each side is to bear its own costs.

DATED this 29th day of December, 2025

ANDY BREUNER
DISTRICT JUDGE

[ ] Guy Alsentzer, Esq.
[ ] Aaron Pettis, Legal Counsel-DEQ