BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
	)	NPDES Appeal No. 17-03
City of Ruidoso Downs and Village of Ruidoso WWTP	)	**MEMORANDUM BRIEF IN SUPPORT OF PETITION FOR REVIEW**
NPDES Permit No. NM 0029165	)	

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Exhibit 3	Total Maximum Daily Load for the Rio Ruidoso (December 13, 2016) (excerpts)
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Exhibit 7	EPA NPDES Permit Writer's Manual, December 1996 (excerpts)
Exhibit 8	EPA Technical Support Document for Water Quality-Based Toxics Control, March 1991 (excerpts)
Exhibit 9	EPA NPDES Permit Writer's Manual, September 2010 (excerpts)
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INTRODUCTION

Pursuant to 40 C.F.R. § 124.19(a), Petitioner Rio Hondo Land & Cattle Company ("Rio Hondo") hereby respectfully petitions the Environmental Appeals Board for review of the terms and conditions of the NPDES permit that the United States Environmental Protection Agency ("EPA") issued to the Village of Ruidoso and the City of Ruidoso Downs on July 25, 2017, which permit is designated as NPDES Permit No. NM0029165. The NPDES permit at issue in this proceeding authorizes the Village of Ruidoso and the City of Ruidoso Downs (collectively "Ruidoso") to discharge effluent from their wastewater treatment plant ("WWTP") into a water quality impaired reach of the Rio Ruidoso in Lincoln County, New Mexico. The subject permit replaces an expiring NPDES permit of the same number which was issued to Ruidoso on July 17, 2012.

In this Petition for Review, Rio Hondo will demonstrate that the EPA's July 25, 2017 decision to re-issue NPDES permit No. NM0029165 – with significantly relaxed water quality based effluent limitations for nutrients – is based on clearly erroneous findings of fact and conclusions of law. Specifically, Rio Hondo will show (1) that the EPA's deletion of concentration limits for phosphorous and nitrogen from the 2017 NPDES permit constitutes illegal backsliding in violation of Clean Water Act §§ 402(o), 33 U.S.C. § 1342(o), and (2) that the EPA's

relaxation of the mass load limitation for nitrogen in the 2017 NPDES permit likewise constitutes impermissible backsliding.[1]

THRESHOLD PROCEDURAL REQUIREMENTS

Rio Hondo satisfies the threshold requirements for filing a petition for review under 40 C.F.R. Part 124. Rio Hondo has standing to petition for review of the permit decision because it participated in the public comment period on the NPDES permit which is the subject of this Petition for Review. Rio Hondo's comments on the NPDES were sent to the EPA in a timely fashion by e-mail on June 4, 2017. *See* 40 C.F.R. § 124.19(a). *See* Exhibit 1.

The specific issues raised by Rio Hondo in this Petition for Review were raised during the public comment period and were, therefore, preserved for review before the Environmental Appeals Board. *Id.* at 5-8 (explaining that the permit's nutrient limitations are the product of backsliding that is impermissible under the

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[1] Additionally, Rio Hondo also contends that the NPDES permit is irrational and clearly erroneous as a matter of fact and law because the mass load effluent limitations for Total Phosphorous and Total Nitrogen incorporated into the re-issued NPDES permit for the Ruidoso WWTP were calculated in an arbitrary and capricious manner in the pertinent TMDLs for nutrients in the receiving segment. While Rio Hondo is aware of and respects this Board's practice of not reviewing the substance of TMDLs in NPDES permit appeals, *see for example In re Moscow, Idaho*, 10 E.A.D. 135, 159 (EAB 2000), Rio Hondo states this issue here for the purpose of indicating that it does not intend to waive its arguments as to this issue in the appropriate fora and at the appropriate times.

Clean Water Act, and that exceptions to the anti-backsliding rule do not apply in this case).

FACTUAL BACKGROUND

1. The receiving water has been in a non-attainment status for nutrients since 1996

Permittee Ruidoso operates a WWTP that discharges treated effluent into the Rio Hondo in Lincoln County, New Mexico. The outfall for the Ruidoso WWTP discharges effluent directly into a stream segment of the Rio Ruidoso that the New Mexico Environment Department ("NMED") has designated as in non-attainment status for water quality standards governing nutrients – specifically Total Phosphorous ("TP") and Total Nitrogen ("TN").

NMED first recognized the receiving segment's nutrient impairment in 1996, and has confirmed the impairment each time that it has conducted systematic monitoring of the stream segment. A summary history of this segment's non-attainment for nutrients is set out in New Mexico's "Final 2016-2018 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report." *See* Exhibit 2 at p. 215. This 2016-2018 Integrated Report shows that the stream segment that receives the effluent from the WWTP (the relevant segment is "Rio Ruidoso – Eagle Creek to Highway 70") has been in a

continuous state of non-attainment with New Mexico's nutrients standards and guidelines since 1996. *Id.* The results of NMED monitoring in 2012 serve as the basis for NMED's 2014 determination – in connection with preparation of the state's 2014-2016 Section 303(d) report – that the receiving segment continues to be impaired by both excess phosphorous and excess nitrogen. *Id.* The NMED reaffirmed this determination in the 2016-2018 303(d) report. *Id.* The excessive amounts of nutrients in the receiving water are associated with violations of both (1) New Mexico's numeric standard for TP and (2) New Mexico's narrative standard for TN. *Id.*

Excursions from state water quality standards for nutrients leads to nuisance algae blooms downstream of the WWTP. Recent assessments by both NMED and Ruidoso point to the likelihood that the receiving water is "nitrogen limited" – that is, the growth of excess algae is strongly correlated with the introduction of excess nitrogen into the stream segment. Accordingly, the adoption and implementation of pollution controls for TN are of particular importance in attainment of New Mexico's water quality standards in the receiving water, as these controls will best facilitate the attainment of *both* numeric and narrative water quality standards for nutrients downstream of the Ruidoso WWTP.

The receiving segment's nutrient impairment was the subject of significant

discussion in the recent Total Maximum Daily Load ("TMDL") for nutrients in the Rio Ruidoso. *See* Exhibit 3 at pp. 13-16. In that TMDL – which was approved by the EPA in December of 2016 – the NMED states that its "[d]etailed assessment of various water quality parameters indicated plant nutrient impairment" in the receiving segment. *Id.* The NMED goes on to state in the TMDL that nitrogen is the limiting factor for algae growth in the receiving segment, and offers this caution regarding the importance of avoiding increases in the discharge of TN above existing levels:

> Therefore, the algal growth assay suggests that to ensure that the narrative WQS are met, *land use and/or point source management activities should avoid any increased inputs of nitrogen as well as nitrogen and phosphorus combinations*.

Id. at p. 16 (emphasis added). Similarly, in its response to Ruidoso's September 29, 2016 comments to NMED regarding a draft version of the 2016 Rio Ruidoso nutrient TMDLs, the NMED wrote as follows: "For the three impaired assessment units of the Rio Ruidoso described in the TMDL, causal variables (TN and TP) continue to be present at levels that do not meet the applicable threshold values (as noted in the 2016-2018 Integrated List of Impaired Waters) and the stream remains impaired for plant nutrients." *See* Exhibit 4.

Even Ruidoso acknowledges the continuous and on-going problems with

nutrient impairment in the Rio Ruidoso downstream of the Ruidoso WWTP. Ruidoso's consultant on nutrient issues issued a so-called Technical Memorandum regarding the status of nutrient pollution in the receiving segment on September 25, 2013. *See* Exhibit 5. In that Technical Memorandum, the consultant concludes that the receiving water showed chemical signs of excess nutrients and "robust filamentous algae growth" consisting of "large mats" of algae and "algae filaments." According to Ruidoso's consultant, "[t]hese . . . conditions were excursions from the nutrient assessment protocol thresholds and indicated nutrient impairment." *Id.*

2. Development of the 2006 TMDL for nutrients in the receiving water

Pursuant to the requirements of Clean Water Act § 303(d)(4), 33 U.S.C. § 1313(d)(4), NMED prepared – and the EPA approved – the first TMDL for nutrients in the receiving stream segment in 2006. *See* Exhibit 6.[2] The 2006 TMDL included a "nutrient discharge budget" – in the form of a designated wasteload allocation ("WLA") – for the WWTP of 2.16 lbs/day of TP and 18.9 lbs/day of TN. *Id.* The 2006 TMDL explains that the nutrient loads set out in the document were calculated using a "simple steady-state mass balance model" that incorporates applicable water quality standards and guidelines for nutrients in the

[2] Exhibit 6 is the chapter of the 2006 TMDL addressing nutrients.

receiving segment: 0.1 mg/L for TP and 1.0 mg/L for TN.[3] Thus, concentration limits of 0.1 mg/L for TP and 1.0 mg/L for TN were developed *outside of* and are *exogenous to* the TMDL process. These concentration limits are the limits that NMED has consistently determined are necessary to assure attainment of all designated uses in the receiving water, and they were *imported into* the TMDL process for the purpose of calculating the associated loading limits. *The concentration limits for TP and TN were not the product of TMDL development.*

3. Previous iterations of the subject NPDES permit in 2007 and 2012 incorporated both mass and concentration limits for nutrients

Subsequent to the NMED's adoption of nutrient TMDLs for the receiving

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[3] The 0.1 mg/L limit for TP in the receiving segment is a numeric standard set by the New Mexico Water Quality Control Commission in the 2000 triennial review. In the 2006 TMDL – and in every regulatory document it has issued concerning nutrients management in the Rio Ruidoso since that time – NMED has explains that support of all designated uses in the receiving water body requires maintenance of a TN:TP ratio of 10:1. *See for example* Exhibit 6 at p. 39 ("[t]he chemical analysis of the Rio Ruidoso's waters supports the projection of a nitrogen standard that is 10 times greater than a phosphorus standard" and that "[w]ith a TP standard of 0.1 mg/L, the corresponding nitrogen standard would be 1.0 mg/L." Hence, NMED has consistently determined – ever since 2006 – that the in-stream target for TN in the receiving water is 1.0 mg/L. As this Board discussed in *In re Moscow, Idaho*, 10 E.A.D. 135, 139 (EAB 2010), water quality based effluent limitations – such as the mass and concentration limits for TP and TN in the Ruidoso NPDES permit – are incorporated into NPDES permits for publicly owned treatment works when technology based effluent limitations alone are insufficient to assure that all designated uses are supported and water quality standards met.

stream segment in 2006, the EPA issued an NPDES permit for the Ruidoso WWTP that incorporated both mass limits and concentration limits. Specifically, the 2007 NPDES permit for the Ruidoso WWTP incorporates two sets of effluent limitations for nutrients: (1) mass load limits for TP and TN which were based on the analysis incorporated into the 2006 TMDL *and* (2) concentration limits for both TP and TN which were set to be equivalent to the receiving stream segment's nutrient standards and targets so as to assure that all designated uses in the receiving stream segment were met.

The incorporation of both mass and concentration limits in the 2007 NPDES permit for the WWTP comports with EPA practice and recommendations. In this connection, the 1996 iteration of the EPA's "NPDES Permit Writers' Manual," EPA-883-B-96-003, states as follows:

> While the regulations require that limitations be expressed in terms of mass, a provision is included at 40 CFR § 122.45(f)(2) that allows that permit writer, at his or her discretion, to express limits in additional units (e.g., concentration units). *Where limits are expressed in more than one unit, the permittee must comply with both*.
>
> As provided by the regulations, the permit writer may determine that expressing limits in more than one unit is appropriate under certain circumstances. For example, *expressing limitations in terms of concentration as well as mass encourages the proper operation of a treatment facility at all times. In the absence of concentration limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low flow periods and still meet*

> *its mass-based effluent limits. Concentration limits discourage the reduction in treatment efficiency during low flow periods, and require proper operation of treatment units at all times*.

See Exhibit 7 at pp. 66-67. The EPA's "Technical Support Document for Water Quality-Based Toxics Control ("TSD")," EPA/505/2-90-001, also stresses that the incorporation of both mass and concentration limits can be critical to the attainment of water quality standards:

> However, mass-based effluent limits alone may not assure attainment of water quality standards in waters with low dilution. In these waters, the quantity of effluent discharged has a strong effect on the instream dilution and therefore upon the RWC [receiving water concentration]. At the extreme case of a stream that is 100 percent effluent, it is the effluent concentration rather than the effluent mass discharge that dictates the instream concentration. *Therefore, EPA recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards.*

See Exhibit 8 at pp. 110-11 (emphasis added).[4] This guidance has particular resonance in this case where the volume of WWTP discharge constitutes a very significant fraction of instream flow in the Rio Ruidoso downstream of the WWTP outfall. According to the 2016 TMDL for nutrients in the Rio Ruidoso, the annual median flow in the receiving segment is 5.9 mgd and the design flow for the

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[4] The EPA recommends that NPDES permit writers utilize the guidance set out in the TSD for the development of water quality based effluent limits in NPDES permits. *See* 2010 iteration of the EPA's "NPDES Permit Writers' Manual," EPA-833-K-10-001. *See* Exhibit 9 at p. 6-11.

WWTP is 2.7 mgd. Thus, fully 31% of the flow in the Rio Ruidoso downstream of the Ruidoso WWTP is made up of WWTP effluent. According to the EPA, the incorporation of both mass and concentration limits in NPDES permits is particularly important in conditions like these in which the effluent stream is a significant fraction of flow.

In advance of expiration of Ruidoso's 2007 NPDES permit for the WWTP, the EPA issued a superceding NPDES permit in 2012. (The 2012 NPDES permit was the immediate predecessor to the NPDES permit that is the subject of this Petition for Review.) The 2012 NPDES permit made small downward adjustments in the mass load effluent limitations for TP and TN, but maintained the nutrient concentration limits that were incorporated into the previous iteration of the NPDES permit: 0.1 mg/L for TP and 1.0 mg/L for TN. The 2012 NPDES permit was a five-year permit scheduled to expire in 2017. *See* Exhibit 10.

4. <u>The challenged 2017 NPDES permit backslides in its effluent limitations for nutrients</u>

On July 25, 2017, the EPA approved re-issuance of the Ruidoso WWTP's NDPES permit – NPDES Permit No. NM0029165 – for an additional five year term. This re-issued NPDES permit – which is the permit that is the subject of this Petition for Review – contains nutrient limitations that violate the Clean Water

Act's prohibition on "backsliding." A comparison of the nutrient effluent limitations in the 2007, 2012, and 2017 NPDES permits for the Ruidoso WWTP is as follows:

	Mass load limitation	Concentration limitation
Total Phosphorous	2007: 2.2 lbs/day 2012: 2.16 lbs/day 2017: 1.64 lbs/day	2007: 0.1 mg/L 2012: 0.1 mg/L 2017: None
Total Nitrogen	2007: 21.7 lbs/day 2012: 18.9 lbs/day 2017: 37.1 lbs/day	2007: 1.0 mg/L 2012: 1.0 mg/L 2017: None

As seen in the above table, the 2017 NPDES permit relaxes the mass effluent limitation for TN at the Ruidoso WWTP and entirely omits the concentration limits for TP and TN that had previously applied to the WWTP's effluent discharge.

As noted above, the 2017 NPDES permit that is the subject of this Petition for Review omits any concentration limit for TP and TN. However, for informational (but not regulatory) purposes NMED has calculated the effective TN concentration limit that is allowed by the 2017 permit, taking into account the NPDES permit's mass load limit for TN and the volume of effluent flow at the

Ruidoso WWTP. *See* Exhibit 11. That effective TN concentration limit is 2.41 mg/L, which is more than double the concentration limit for TN that was incorporated into the 2007 NPDES permit. Additionally, Ruidoso has advised the EPA that it will not be able to meet the new augmented load limit on TN discharges at the Ruidoso WWTP. *Id.* (Ruidoso acknowledges that its "state-of-the-art Plant is not capable of meeting TN effluent limitations based on the TN WLA"). Accordingly, in light of anticipated excursions beyond the relaxed nutrient discharges from the Ruidoso WWTP which Ruidoso has warned of, there are no assurances that the terms and conditions of the 2017 NPDES permit that is the subject of this Petition for Review will assure the attainment of applicable water quality standards for nutrients.

5. Rio Hondo's comments on the backsliding issue, and the EPA's response to Rio Hondo's comments

Prior to re-issuance of NPDES Permit No. NM0029165 on July 25, 2017, and during the development process for that permit, the EPA issued a proposed permit for the Ruidoso WWTP on May 5, 2017 and sought public comment on the permit. The proposed permit was accompanied by a "Fact Sheet" that described the terms and conditions of the proposed permit, including the relaxed nutrient effluent limitations relative to previous iterations of the Ruidoso WWTP NPDES

permit. *See* Exhibit 12. In the Fact Sheet, the EPA acknowledged application of the Clean Water Act's anti-backsliding prohibition to the re-issued permit, and conceded that the effluent limitations for nutrients do – in fact – constitute backsliding. However, the EPA states in the Fact Sheet that a statutory exception to the anti-backsliding rule is applicable here: the exception that allows for the relaxation of effluent limitations "where the existing permit limit sought to be revised is based on a TMDL or other WLA, and the revised permit limit assures attainment of the water quality standard at issue." *Id. citing* Clean Water Act § 303(d)(4), 33 U.S.C. § 1313(d)(4).

In its comment letter, Rio Hondo objected strenuously to the nutrient limitation backsliding and showed that the backsliding was not justified for two main reasons. First, Rio Hondo explained in its comment letter that the claimed exception does not apply because the concentration limits for TP and TN in the previous iterations of the NPDES permit (in 2007 and in 2012) were based on water quality standards and guidelines set by the NMED, and exist independently and exogenously of the TMDLs and the associated WLAs. *See* Exhibit 1. Second, Rio Hondo explained in its comment letter that the effluent limitations for nutrients that are incorporated into the re-issued NPDES permit for the Ruidoso WWTP NPDES cannot assure the attainment of water quality standards in the

receiving segment. *Id.*

Presumably in response to Rio Hondo's comment, the EPA modified its explanation for the acknowledged backsliding when it issued the final permit for the Ruidoso WWTP. In the "Response to Public Comments" portion of the re-issued NPDES permit (in its final form), the EPA states that backsliding is justified by two statutory exceptions to the anti-backsliding rule: Clean Water Act § 303(d)(4)(A), 33 U.S.C. § 1313(d)(4)(A), and Clean Water Act § 402(o)(2)(B)(i), 33 U.S.C. § 1342(o)(2)(B)(i). The first of these two provisions was the one which was put forth by the EPA in the Fact Sheet that accompanied the proposed re-issued permit. The second of these two provisions was newly raised in the final iteration of the permit, and sets out an exception for backsliding where new information of certain narrow types is acquired after permit issuance.

In this Petition for Review, Guardians explains that neither of these statutory exceptions to the anti-backsliding rule are applicable here.

6. Factual summary

In a nutshell, then, the segment of the Rio Ruidoso which receives the effluent flow from the Ruidoso WWTP is already nutrient impaired and is particularly susceptible to further impairments resulting from the incremental addition of excess nitrogen to the system. Nonetheless, the 2017 NPDES permit

for the Ruidoso WWTP (1) authorizes a significant increase over the 2012 NPDES permit in the mass load of TN that the Ruidoso WWTP may discharge into the Rio Ruidoso and (2) entirely excises the concentration limits that had previously applied to the effluent of both TP and TN to the Rio Ruidoso. Rio Hondo respectfully submits that the Environmental Appeals Board should review these terms and conditions of NM0029165 and find that those terms are clearly erroneous as they violate the Clean Water Act's prohibition on backsliding in successive iterations of NPDES permits.

ISSUE PRESENTED FOR REVIEW

The issue presented for review in this Petition for Review is whether the terms and conditions of the renewed permit for the Ruidoso WWTP – and specifically the effluent limitations for TP and TN – violate the Clean Water Act's prohibition on backsliding in effluent limitations incorporated into NPDES permits.

ARGUMENT

With this Petition for Review, Rio Hondo requests that the Environmental Appeals Board review three specific terms and conditions of NPDES Permit No. NM0029165: (1) the omission of a concentration limit for TP, (2) the omission of a concentration limit for TN, (3) and the significant relaxation of the TN mass load

limit in the re-issued permit. As explained below, these terms and conditions are based on clearly erroneous findings of fact and conclusions of law and, therefore, merit this Board's review.

As set out above, the EPA acknowledges that there is backsliding with respect to the relevant effluent limitations, but states that the backsliding is justified by two statutory exceptions to the anti-backsliding rule: Clean Water Act § 303(d)(4)(A) and Clean Water Act § 402(o)(2)(B)(i). Neither of these two exceptions apply in this case, and the backsliding is therefore unjustified and impermissible.

1. Section 303(d)(4)(A) does not apply to the backsliding in the TP and TN concentration limits; the exception applies only to backsliding on mass load limits in an NPDES permit when those mass load limits derive from a TMDL

In its "NPDES Permit Writers' Manual," EPA-833-K-10-001, the EPA explains the conditions that must attain for the exception provided by Clean Water Act Section 303(d)(4)(A) to be applicable in a non-attainment stream segment such as the segment that receives the effluent from the Ruidoso WWTP:

> [This section] allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a *nonattainment water*) if the permittee meets two conditions. First the existing effluent limitation must have been based on a [TMDL] or other [WLA] established under CWA Section 303. Second, relaxation of the effluent limitation

> is only allowed if attainment of water quality standards will be ensured . . . .

See Exhibit 13 at p. 7-3 (emphasis in original).

The EPA first incorporated a concentration limit for TP into the Ruidoso WWTP NPDES permit in the permit iteration that became effective January 1, 2001. That concentration limit – which preceded development of nutrient TMDLs for the receiving segment by more than five years – was brought forward into the 2007 and 2012 permits without modification. The EPA first incorporated a concentration limit for TN into the Ruidoso WWTP NPDES permit in the permit iteration that became effective on September 1, 2007. That concentration limit – which was pegged to the target TN:TP ration of 10:1 that the NMED has determined is necessary to maintain water quality standards – was brought forward into the 2012 permit without modification.

Plainly and obviously, neither of these two concentration limits is based on a TMDL or other WLA developed under Clean Water Act § 303(d)(4). As explained above, these concentration limits are based on New Mexico's numeric water quality standard for TP, and NMED's target TN:TP ratio of 10:1 for TN. The claimed statutory exception applies *only* if the relaxed effluent limitation is based on a TMDL or other WLA. Since the TP and the TN concentration

limitations in NPDES NO. NM0029165 were *not* developed in this context, the exception does not apply.

2. Section 303(d)(4)(A) does not apply to the backsliding on any concentration limit unless the newly established effluent limitation assures attainment of applicable water quality standards

For a separate and additional reason, Section 303(d)(4)(A) is not applicable in this case – either to justify the EPA's backsliding on TP and TN concentration limits or to justify the EPA's backsliding on TN mass load limits. This is because the EPA cannot assure that the relaxed effluent limitations will assure attainment of pertinent water quality standards. This Board has previously held that the degree of certainty as to attainment of water quality standards is plainly set out in the language of the statutory exception: "one long-standing principle is that permits *must* 'ensure' compliance with water quality requirements." *In re District of Columbia Water and Sewer Authority*, 13 E.A.D. 714 (EAB 2008) (emphasis added) *citing* 40 C.F.R. § 122.4(d), *In re City of Marlborough,* 12 E.A.D. 235, 250 (EAB 2005) (finding that "possible" compliance is not the same as "ensuring" compliance), *In re Gov't of D.C. Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, 342 (EAB 2002) (finding that "reasonably capable" does not comport with the "ensure" standard).

In this case, the receiving segment has been in non-attainment for nutrients

since 1996. This state of water quality impairment for nutrients – and the associated algae blooms – has persisted on an on-going and continuous basis, even after the following regulatory measures were taken to manage nutrients: (1) the development of numeric and narrative standards for TP and TN in the early 2000s, (2) the 2006 development of nutrient TMDLs for the receiving water including total load calculations for nutrients in the Rio Ruidoso, and the calculation of appropriate WLAs for nutrients discharged from the Ruidoso WWTP, and (3) the issuance of NPDES permits in 2001,2007, and 2012 that incorporate both concentration limits based on water quality standards in the receiving segment and mass load limits for TP and TN as calculated in the 2006 TMDL.

Now, in apparent response to Ruidoso's desire for relaxed permit limitations that more closely conform to the actual performance of the WWTP, the EPA has authorized an *increased* discharge of nutrients in the WWTP effluent despite the fact that *existing* regulatory limits are unable to assure attainment of pertinent water quality standards. For TN, the NPDES permit subject to this Petition for Review imposes an effluent limitation of 37.1 lbs/day. This limitation is almost double the mass load limitation for TN incorporated into the previous iterations of

the Ruidoso WWTP NPDES permit – 18.9 pounds/day.[5] Furthermore, and as discussed above, the 2017 iteration of the NPDES impermissibly omits any concentration limit for TP and TN, but NMED has calculated that the effective TN concentration limit – taking into account the mass load limits and the volume of effluent flow from the WWTP – is 2.41 mg/L. This concentration is more than double the concentration limit for TN incorporated into the 2007 NPDES permit.

It simply defies common sense and logic for the EPA to argue, as it must in this case in order to justify the backsliding on nutrient limitations, that relaxing water quality standards for nutrients in the Ruidoso WWTP NPDES permit will assure attainment of water quality standards when the more stringent effluent limitations incorporated into the previous permit iterations did not have that effect.

Furthermore, and as discussed above, the EPA has noted the critical importance of incorporating concentration limits into NPDES permits that govern discharge from outfalls that receive relatively low levels of dilution. These considerations are especially important in the context of the Ruidoso WWTP NPDES permit because the effluent from the WWTP constitutes a significant

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[5] The 2016 TMDL also raises the *total* permissible load of TP and TN that can be discharged into the Rio Ruidoso. The 2006 TMDL calculated the total permissible TP load as 2.72 lbs/day and the total permissible TN load as 27.2 lbs/day. Those total load amounts were increased in the 2016 TMDL to 3.39 lbs/day for TP and 84.8 lbs/day for TN.

fraction of the total flow in the receiving stream segment, and the quality of that segment is strongly influenced by the quality of the effluent. The EPA has simply not explained how omission of the concentration limits will assure attainment of water quality standards.

Finally, and as also discussed above, Ruidoso has advised the EPA that it will not be able to meet even the relaxed load limit on TN discharges at the Ruidoso WWTP. Accordingly, in light of anticipated excursions beyond the relaxed nutrient effluent limitations contained in the challenged NPDES permit for the Ruidoso WWTP, there are no assurances whatsoever that the terms and conditions of the 2017 NPDES permit that is the subject of this Petition for Review will attain applicable water quality standards.

3. Clean Water Act § 402(o)(2)(B)(i) applies in very narrow circumstances that are not present here

The EPA's claim that the Clean Water Act § 402(0)(2)(B)(i) applies here is clearly erroneous. The EPA explains that the exception – which applies in narrow circumstances where "new information" is present – is applicable in the following circumstances:

> New information (other than revised regulations, guidance, or test methods) is available that was not available at the time of permit issuance and that would have justified a less stringent effluent limitation. If the effluent limitation was based on water quality

> standards, any changes must result in a decrease in pollutants discharged.

See Exhibit 13. The relaxed effluent limitations for nutrients in the 2017 NPDES permit for the Ruidoso WWTP does not meet these conditions for at least two separate and independent reasons.

First, the EPA's argument that the development of the 2016 TMDL for nutrients in the Rio Ruidoso is "new information" justifying nutrient backsliding fails to acknowledge this core fact: the revision of the nutrients TMDL constitutes a "revised regulation," and therefore the revision of the TMDL cannot justify backsliding by the express terms of the exception. Second, and as explained above, the relaxed nutrient limitations in the NPDES permit for Ruidoso's WWTP will contribute to a general *increase* in the amount of nutrients discharged into the already impaired receiving stream segment, and will *not* "result in a decrease in pollutants discharged." For these reasons, the statutory exception to the anti-backsliding rule provided for in Clean Water Act § 303(d)(4)(A)(i) does not apply in this case.

4. <u>The anti-backsliding exception "safety clause" of Section 402(o)(3) prohibits all backsliding in this case</u>

Finally, even if one of the statutory exceptions to the anti-backsliding rule applied in this matter – which is not the case as explained above – the backsliding

in nutrient effluent limitations would still be prohibited because it violates the backsliding exception "safety clause" of Clean Water Act Section 402(o)(3), 33 U.S.C. § 1342(o)(3), which "prohibits the relaxation of effluent limitations in all cases if the revised effluent limitation would result in a violation of applicable effluent guidelines or water quality standards." *See* Exhibit 13 at p. 7-4. As explained above, the increase in nutrient discharges authorized by the re-issued NPDES permit for the Ruidoso WWTP will contribute to an overall elevation in the level of nutrients discharged into the Rio Ruidoso, which is already in a non-attainment status for nutrients. For this reason, it is impermissible for the EPA to relax the effluent limitations for nutrients in the re-issued NPDES permit without running afoul of the statutory prohibition on backsliding – even in the event that one of the limited exceptions to the anti-backsliding rule applied in these circumstances, which is *not* the case.

CONCLUSION

When it re-issued NPDES Permit No. NM0029165 in 2017, the EPA incorporated nutrient limits that constitute illegal backsliding from previous iterations of the Ruidoso WWTP NPDES permit. Specifically, the re-issued NPDES permit backslides from the previous iterations of the NPDES permit in the following ways: (1) the re-issued permit has no TP concentration effluent limit,

unlike previous iterations of the permit which incorporated a concentration limit of 0.1 mg/L for TP; (2) the re-issued permit has no TN concentration effluent limit, unlike previous iterations of the permit which incorporated a concentration limit of 1.0 mg/L for TN; and (3) the re-issued permit significantly relaxes the TN mass load effluent limit, approximately doubling the amount of TN that the Ruidoso WWTP may discharge into the Rio Ruidoso under color of the permit.

Rio Hondo respectfully submits that this Board should remand NPDES Permit No. 0029165 to the EPA, so that all the effluent limitations for nutrients in the permit – including the concentration limits for TP and TN, and the mass load limit for TN – are corrected to conform to the Clean Water Act's prohibition on backsliding.

Respectfully submitted: October 12, 2017.

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CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing Memorandum Brief in Support of Petition for Review in the matter of NPDES Permit No. NM0029165 were served by on the following persons by first class mail on October 12, 2017:

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STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I hereby certify that I used the "Word Count" feature of WordPerfect X5 to count the number of words in this Petition for Review, and that the Word Count utility counted 5,465 words in this petition.

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