STATE OF MINNESOTA IN COURT OF APPEALS

In the Matter of the Denial of Contested Case Hearing Requests and Issuance of National Pollutant Discharge Elimination System/State Disposal System Permit No. MN0071013 for the Proposed NorthMet Project St. Louis County Hoyt Lakes and Babbitt Minnesota

DECLARATION OF MICHAEL SCHMIDT

Appellate Case Nos. A19-0112

A19-0118

A19-0124

I, MICHAEL SCHMIDT, in accordance with section 358.116 of the Minnesota Statutes and rule 15 of the Minnesota Rules of General Practice, declare as follows:

Background

- 1. I served as Staff Attorney, State Program Administrative Coordinator for the Minnesota Pollution Control Agency ("MPCA") from March 2015 until February 1, 2019. My responsibilities included, among other things, legally advising MPCA leadership and staff on permit development, permit enforcement, administrative rulemaking, and general agency matters. My legal work covered industrial wastewater, industrial stormwater, mining, Clean Water Act section 401 certifications, septic systems, and underground storage tanks. My primary focus was on water-quality matters.
- 2. I was involved in legally advising MPCA throughout the permit-development and issuance process for the Poly Met NorthMet mining project NPDES/SDS Permit No. MN0071013 (the "Poly Met Permit").

- 3. Before working at MPCA, I worked as a Water Quality Associate for the Minnesota Center for Environmental Advocacy ("MCEA"), one of the relators in this appeal.
- 4. I make this Declaration based on my personal knowledge and in support of MPCA's sur-reply to WaterLegacy's motion to transfer or stay this case.

MPCA-EPA Conference Calls Throughout the Permit-development Process

- 5. MPCA and EPA conducted twice-monthly conference calls about the Poly Met Permit from August 2016 until August 2017 and then conducted conference calls and meetings as necessary to resolve any concerns EPA had about different iterations of the draft permit.
- 6. Early on in the process, the conference calls were more conceptual than about specific permit language, problems, or solutions. At this early stage, MPCA permit-development staff would develop general permit approaches and ask EPA for feedback on a general approach. After those calls, MPCA staff members would use EPA's feedback to draft permit language. As we approached the summer of 2017, the conference calls became less abstract and focused on particular permit language, specific concerns, and solutions to those concerns.
- 7. The purpose of these discussions through 2017 was to enable MPCA and EPA to collaborate effectively and efficiently to produce a good NPDES permit. From MPCA's perspective, it would not have made sense to unilaterally develop a permit that

EPA was likely to eventually object to. We sought EPA's feedback throughout the permit-development process to avoid having to change course after investing resources in developing a permit that did not satisfy EPA. We believed that it was more efficient to work together with EPA throughout the process and considered EPA's feedback in developing the draft permit that we put out for public comment. Given the complexity of the NorthMet project and Poly Met Permit, it would have been a waste of time, effort, and resources to proceed otherwise. The permit-development process works better if MPCA and EPA are on the same page.

The April 5, 2018, Conference Call Between MPCA and EPA

- 8. I was present for the April 5, 2018, conference call where EPA read comments about the pre-proposed draft version of the Poly Met Permit to MPCA staff.

 To my recollection, I was the only MPCA staff member to take notes during that call.
- 9. EPA's comments in the April 5, 2018, call consisted of concerns that EPA had already discussed with MPCA during the permit-development process. Those comments also overlapped with written comments that MPCA had received on the draft Poly Met Permit during the public-comment period that had ended on March 16, 2018 (about three weeks before the call).
- 10. Shortly before the April 5, 2018, conference call with EPA, I had reviewed written comments submitted by, among others, several of the relators in this appeal, including WaterLegacy, MCEA, and at least one of the tribes. As I took notes on the EPA

call, I saw that (except for an issue concerning domestic wastewater) EPA's feedback overlapped with relators' written comments; thus, the issues raised by EPA's comments had already been raised by relators and other stakeholders.

WaterLegacy's Accusations Regarding EPA Feedback on the Poly Met Permit

- 11. At several points in WaterLegacy's Motion for transfer, WaterLegacy accuses MPCA of efforts to "suppress[]" EPA's feedback and to mislead the public by not disclosing in MPCA's response to comments that EPA's feedback overlapped with stakeholders' written comments that the latter had submitted during the public-comment period. *See* WaterLegacy Reply, at 1, 17–18. Those accusations are misguided. MPCA responded to comments received during the comment period, which satisfies MPCA's obligations under Minnesota law. MPCA provided oral responses to EPA feedback throughout the permit development process.
- U.S. Steel Corporation Minntac tailings basin (the "Minntac Permit") as a model for how to address EPA written comments into responses and the draft permit, noting that "EPA's comments on the draft Minntac permit were provided in writing to MPCA, discussed in MPCA's Findings of Fact on the Minntac permit, and included in the administrative record for the public and this Court to review, along with MPCA's detailed responses to the substance of EPA's comments." *Id.* at 7. WaterLegacy argues that "MPCA's practices and the resulting deficiencies in the record are a marked divergence from other

Minnesota NPDES permitting cases, where EPA's comments and MPCA's responses to those comments are part of the public record." *Id.* at 6.

- 13. I was also the staff attorney who worked on the Minntac Permit. MPCA applied exactly the same criteria addressing public comments and preserving the administrative record for the Minntac Permit as for the Poly Met Permit. The difference between the two is that EPA submitted written comments during the public comment period for the Minntac Permit but did not do so for the Poly Met Permit.
- WaterLegacy Reply, at 6, in its responses to overlapping written comments by public commenters. It just did not attribute those comments to EPA, because EPA did not submit comments during the public comment period. In MPCA's responses to comments, we cross-referenced where multiple commenters raised the same issue. Had we included EPA comments in the responses to comments, we would only have cross-referenced to the responses that we had already made because EPA's concerns overlapped with the concerns of other stakeholders who submitted written comments. As a substantive matter, MPCA had already responded in writing to all of the concerns that EPA voiced to us orally. Thus, had we attributed certain substantive comments to EPA, we would not have changed the substance of the MPCA's responses at all. We would have just cross-referenced answers to the concerns EPA shared with other stakeholders (who actually submitted written comments that we could cite to).

- 15. Based on my experience at MPCA, I cannot speak to whether it was common practice for EPA Region 5 to submit written comments on draft individual NPDES/SDS permits for complex projects like the NorthMet mining project. However, in my experience at MCEA—where we routinely submitted written comments on proposed NPDES/SDS permits to MPCA during the public-comment period—it was unusual for EPA to submit written comments on the projects that MCEA commented on.
- my experience, if the EPA had agreed that all issues were resolved, it would have sent MPCA an email or letter confirming such a key fact." WaterLegacy Reply Ex. F (Fowley Decl.) ¶ 17. I cannot speak to EPA Region 1's practices, but in my experience, it was unusual for EPA Region 5 to send a letter to MPCA stating that, in its opinion, all issues with a proposed permit had been resolved and that EPA did not intend to object to the permit. Typically, we never expected any written communication of this kind from EPA Region 5. Generally, if EPA Region 5 did not have a problem with an MPCA permit, it wrote nothing at all.
- 17. At no point in time did MPCA ever have any intention or make any effort to conceal EPA's involvement or concerns with the Poly Met Permit from the public. That was never once discussed. I was involved throughout the Poly Met Permit development-and-issuance process and worked closely with staff and leadership on these efforts. I never had any conversations, and I am not aware of any conversations among

staff or leadership about suppressing EPA public comments or concealing EPA's involvement in the permit-development process. I have no knowledge of the alleged telephone call between former MPCA Commissioner John Linc Stine and EPA Region 5 Administrator Cathy Stepp "to complain about EPA's planned EPA staff written comments on the NorthMet permit." *See* WaterLegacy Reply, at 5. I never participated in, or heard of, any conversation in which EPA was discouraged from submitting written comments. I only learned after the close of the public comment period that EPA had not submitted written comments.

Minnesota Data Practices Act Policy and Best Practices

- 18. At several points in its reply, WaterLegacy states in reference to my handwritten notes from the April 5, 2018, conference call with EPA that "MPCA did not retain the notes MPCA staff took during this critical phone call, even though a Minnesota Government Data Practices Act request had already been made explicitly requesting any notes of phone conversations with EPA." *See* WaterLegacy Reply, at 1; *see generally id.* at 15–17.
- 19. My handwritten notes from the conference call with EPA were not covered under WaterLegacy's Data Practices Act ("DPA") request, because—as WaterLegacy acknowledges—it filed its request for "meeting notes and phone conversation notes pertaining to written or oral communications with EPA . . . on March 26, 2018, before the April 5, 2018 call and notetaking." *See id.* at 6. It was MPCA's policy, which was

consistent with the Data Practices Act, that a records request applies only to documents in existence on or before the date of the request. MPCA's obligation to release responsive documents is not an ongoing obligation; if it were, there would be no way to adequately respond to and complete a records release, because more responsive records may always be created. My notes from the EPA conference call did not exist when WaterLegacy made its DPA request. Accordingly, my April 5, 2018, handwritten notes were not subject to release under WaterLegacy's March 26, 2018, DPA request.

- 20. I do not remember specifically what I did with my handwritten notes from the April 5 conference call, but I believe that I treated notes from this call the same way I treated other legal notes that I created during my time at MPCA. The notes that I would take on calls and in meetings were not verbatim transcriptions or notes about issues outside my purview as staff attorney. They were notes about the legal issues that the call or meeting raised in my mind so that I could properly advise MPCA in my capacity as a staff attorney. It was my general practice to "go paperless." I would not retain my handwritten notes, because I would integrate those notes into my typed legal work product. As a result, the handwritten notes would become superfluous because the relevant points were incorporated into my legal research and other legal work product.
- 21. Accordingly, when WaterLegacy made requests after the April 5, 2018, conference call, the handwritten notes themselves would have been gone and their remaining substance would have been properly withheld under the privilege exceptions

of DPA section 13.393. Under this provision, if (as here) a record—such as attorney work product or the contents of a privileged attorney-client communication—would be protected in court, it is properly withheld under the DPA. Because I was acting in my capacity as attorney for MPCA, my notes and resulting legal work fall within this exception to the DPA. As our records releases to WaterLegacy show, MPCA would distinguish between non-legal documents (such as emails) and legal work product or advice. We would withhold records only pursuant to DPA section 13.393, under which my April 5, 2018, notes and subsequent legal research and work product fall. WaterLegacy states that "even data that might otherwise be shielded from view must be maintained as public data once a [DPA] request has been made." *Id.* at 16. Insofar as I know, my legal research and resulting work product that grew out of my notes from the conference call may still exist, but they would not be subject to disclosure under DPA section 13.393.

22. WaterLegacy's reply also cites to Minnesota Statutes section 15.17, which governs record preservation and retention, again approvingly citing to MPCA's practices concerning the Minntac Permit. But I was responsible for advising MPCA staff and leadership on records preservation and retention requirements for both the Minntac Permit and Poly Met Permit. I provided the same advice, and MPCA's processes and procedures were the same, in both instances.

- 23. With respect to record preservation, when MPCA would receive a DPA request, it was agency practice for the records management staff or the staff attorney to (1) send an email to everyone who may have responsive records about preservation requirements, and (2) create a folder on a shared drive where everyone could deposit responsive records for compilation and my review. This process was identical for the Minntac Permit and the Poly Met Permit. For WaterLegacy's DPA request, I reviewed every record in the shared drive to ensure that all responsive records that were not otherwise subject to an exception were turned over. I ensured that we released every responsive record that we were required to disclose under the law.
- 24. With respect to record retention, I would regularly review MPCA's record-retention policy and advise MPCA staff and leadership on recordkeeping best practices. I gave staff-wide training on the retention policy and best practices, and I gave refresher advice to the staff working on the Minntac Permit (which process WaterLegacy cites as a model) and the Poly Met Permit.

My Email Exchange with Kevin Reuther

25. As WaterLegacy did in its original motion to transfer or stay, WaterLegacy continues to erroneously contend that MPCA acted in bad faith based on my reply to an email. In a December 17, 2018, email exchange I had with MCEA's Kevin Reuther, he asked whether I had "hear[d] anything from EPA on the PolyMet permit" and to forward to him "anything in writing" from EPA. *See id.* Ex. C, at 28. I responded, "We did not get

any feedback from EPA on the PolyMet permit." *Id.* WaterLegacy writes in its reply, "The *post hoc* characterization by MPCA's counsel of the email to relator [MCEA] denying that any feedback had been received by [MPCA] on the permit as relating only [to] the permit's October 25, 2018 version is nether supported by the evidence nor demonstrative of MPCA's candor." *Id.* at 17.

26. WaterLegacy persists in making an unfounded accusation. In fact, MPCA's response memorandum accurately captured the context of this email exchange. See MPCA Response, at 9. Before receiving Mr. Reuther's December 17, 2018, email, I had earlier communicated with him about the timing of EPA's pending review of both the air-quality and water-quality permits for the NorthMet project. Before responding to him, I needed to check with Leslie Fredrickson (the staff attorney working on the air-quality permit) about the timing for the air permit. I interpreted the context of Mr. Reuther's question as following up on EPA's October 25, 2018, pre-proposed permit-review process (which MPCA had announced publicly), not about prior EPA review or feedback. I did not interpret Mr. Reuther's email as an all-encompassing Data Practices Act request, which MCEA has regularly filed in the past. It was no secret that we had been working with EPA to develop the Poly Met Permit. Had I interpreted Mr. Reuther's email as an inquiry into whether we had ever received any feedback from EPA about the Poly Met permit (a question that Mr. Reuther had no need to ask), I would have, of course, responded that we had.

I declare under penalty of perjury that everything I have stated in this document is true and correct.

Dated: June 12, 2019

Polk County

Des Moines, Iowa

Michael Schmidt

Former Staff Attorney, Program Admin. Coordinator

Minnesota Pollution Control Agency

Wall -		62-CV-19-4626	Filed in District Cour
		Mark Ackermen Jillian Roundtree	State of Minnesota
		Cardice Baves	1/10/2020 5:51 PM
		Ken's Pierard Barbara west	
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- N			
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100		- Just Charle Line 1 to 1 to 2	
11.30		EPA SWEET IN THE S	
	(KM)	RP Analysis - GLI procedures werent references	
		- TSD wasn't referenced	Y 1
-		- MPCA - procedures to conduct RP analysis	
1		MIPCH - PIBLEBURG TO CHILLES IN	
		RC-PCA used a qualatature approach. Looked at treateurers	sery proposed
19		- Membruse/RO/NF - establish target good for affecting	estegn
100		system to neet effluent target.	
-		- System is designed to never exceed 10 mg/l 504.	
	TU		
	M	XX Send EPA background data from pilot study/modeling	
		. (Design + Operation Report)	
-		the second was part to me to be to be the destite	-3
	(KM)	Concerned about Hy - was it evaluated in pilot study?	
-	(00)	Pelot testing + modeling about Hy would be < 1.3 mg/l (64))
-	(KC)	That terry	
	(KM)	EPA not confortable w/ luck of WARELS	100
	(CB?)	EPA thinks there should be WUBEL ever though There is no dat	a/ NI.
	(Km)	Wants to see data reviewed for each parameter listed in the	
	(10.11)	application for parameters believed present.	
		- and an in office I TED for cityethers lorocedures to follow	when
		- PW Manual refers to TSD for situations/procedures to follow	
-		triere is no duta (GII, 132)	
	(KP)	Application states constituents that may be present	
-		- Permet shield issue	
-		- Limits provide degree of assurance Was will be not	permits
		- EPA vould establish limits - but would remove limits later 1	
			4
		on real operating data	
(3)			

62-CV-19-4626

State of Minne

	Mark Ackernan Mark Compton	Filed in District Cou State of Minnesot
	Cardice Bayer Milian Roundtree	1/10/2020 5:51 PI
	Krista McKin Barbara Wester	
	Kenn Picrard	
	EPA Call	2/13/18
	35	77.0
	Mark Acknown - send map links (difficult to read)	1.
	that a grading beat for manual or reference to the	2/4
	Mark Ackerman	- 14
Lett	- Permit has TBELS which are higher than Was. This could	authorze
	a discharge above WQ.	
RC	- NO RP, System designed to treat 50g to 10 which will treat,	netuls
	down to was.	
MA	Not clear how meeting soy target will neet metal criteria. How	v is
- Wen	achieving soy meeting was for metals.	
Ac	System engineered to have membrane pore size to capture the change	a contract of the contract of
110	of various metals ions	4
MA	Hy- Pilot study was not conclusive for Hy.	
	Infruent to worts has low concentrations Hy due to traconite	rullings -
	removing Hy.	-1
Св	- What about influent from Min Site?	93.
	- Water from mine site goes to water - metals are removed.	
F. Bey	from twat portion of the wars discharges to FTB. It's be	asically treated 2x
Km	Have we thought about uncertainty - how well will the treate	
	systen work.	
MA	What was the scale of the Pilot Study in relation to operation	? How
	does this affect potential uncertainty?	
RC		of 1+nty/Ro
	It's a modular system - easy to add membranes + provide a	
	trentment if needed	
MA	How grickly can truy modify to system	
RC	Compay plans to route effluent to TB during stert up.	
(1)		-

TTEPPEPPPPPPP

62-CV-19-4626

Filed in District Co State of Minnes

W-5 V		
KM 1.	s there a requirement for the Permittee to use high quality line	
	[I and morder t	9
RC 7	That we the poduct chosen in Their design	9
0 11	the design of the second	1
W RC	Consider requirement to use high abally	7
[] BW	Set limit to Al in the permit - 1 ch will consider	
	The second secon	
TT RC	Maybe PCA carconsder effluent limits for metals - discuss of Jeff -Notad trus true - NO RP Wait until after PN	
D /	- No tat this time - NO RP.	6
	- Wait until after PN	6
The second secon		6
	Cliffs Permit Transfer	
* [Will PolyMet ter request termination of TB permit?	0
U	- Mike will follow up	6
BW	What portions of CE permits will be laking over by	6
RC	Transfer 54089 to Polyment	6
IKM	SD026?	6
		6
	Internal discussion on the light for 18120 at THEE.	6
1.1	Little agraphs a subject to a subject to the little agraph and the subject to the	6
ngg	EPA wants to submit connects - Make clear what EPA concerns are.	a
KP	EPA waits to submit comments	0
	Clunky permit conditions	CH
	EPA Will submit connects during PN period.	
KP.	EPA will discuss draft comments	8
4.42 H As	as they " and so the discount of the many of the " yet of	8
		8
* X	Set up cull early next week - (9 or 11, or 10 Monday)	54
71 2		4
	Does PCA retain authority to do a unamounced inspections?	pl.
D BW	- Permt is standard layunge 6.16.13 115.04; 115 B. 17 5 who	4
	- Permit is standard Laguerge 116.091	4
	7001.0150 suhp.3(1)	6
	1000000	7

7	62-CV-19-4626	File II - District Oss
N	Actu, Mark, Candice, Kevin, Jillian, - EPA	Filed in District Co State of Minneso
		1/10/2020 5:51 F
		stra Ira
E	PA Call	4130/18
	4 - 200 1 47	
E	comments - 2500 individual comments	
	- 4 CCH Requests for 401/NPDES	
	- Focusing on "Muteral Issue of fact." CCH - End of M	lay (PNR &)
	Send comments received to EPA via thank drive.	
	ich - Factual Ksues	
	Appeals - Legal issues/arguments	
	repens - Legal 12 soes judy ones 15	
		-
	Set up call - 3 weeks in May 21 week	

Poly Met - Treatment Technology Presentation

9/25/18

Adaptive Mgat

- -Modular system
- Multiple membrane types (RO + NF)
- Seepage capture can be adjusted can put more to TB
- Effluent recycle to TB for short term control of effluent

Mercung Removal

- Filtration through theorete tailings (adsorption)

 Expected to remove they to 1.0 ng/l before treatment
- Greensand filtration some removal
- Membrane separation 22-99 % membrane rejections have been reported by vendor
 Engle Mine uses RO influent vanes 1-2.5 rg/l -> effluent 0.5 ng/l
- EPA concerned about Hy renoral from NF the for another mine shows

 NF removes Hy

RP/Limits Development

- Expected effluent quality shows no RP,
- PCA ment assign limits before actual data is available when the pilot/FEIs data shows < wqs.
- System is designed to treat for 10 mg/l soy
 - Operating target 9 mg/l to consider operational issues of RD

Anthacksholing

- EPA athinks you can remove limits in later permits if there is no RP on actual data. - * Cannot provide a specific actual example prough.

EPA/MPCA

9/25/18

Permit Enforceability (EPA)

- Permit as a shield
- How are items reports etc in the permit acted upon
- If conditions change, reports are required.

- Reports become point of the perut etc.

- How is there accountability? How do you know what is enforceable?
- cyptures when plans/report get folded into true permit?
- Adaptive agent is good to be evaluated for perent mod.
- Ducuss correctue actions 9/26 mtg.
- EPA how will PCA burdle corrective actions?

Example 6.10.73 - not clear (last P)

"Failure to implement ... is a violation of a permit"

- Maybe add something like this?

- Lack of general prohibition - no narratue prohibiting the permittee from violating WQS.

6.16.4 - Citis TBELS

- Remove "except according to code "

Tables - TBEL = we higer than was

Add - How do TBEL = work for Fact Sheet

- Clarify intert of TBEL = - make sure it doesn't contradict was.

EPA/MPCA

9/25/18

Permossychapson (racypingaru)

Enforceability of Internal Operating limit. - EPA can only enforce EOP.

- MPCA disagrees

- Case law has not shown EPA can empres internal

operaty limit. (wester)

EPA - Potentil Pennts where limits were removed? (Antibacksliding issue)

Ohio

Powerplants

Permit mod rationale?

MMP - There are trings up in the internal process tray could do to reduce they

Backsliding - what does Mn Rules say? Federal rules?

Donestic lands at Spool - add ley. to Fact Sheet

Get better maps.

See General 15W CSW for violation of WQS/agrange

EPA/MPCA

9/26/18

EPA - Bas Reoperer language. Is it specific to wwrs?

PCA - has standard boilerplate

I Respener larguage - repetate larguage for respener?

Is there a rechains for citizen to open permit?

They can see for violation of was.

Is the permit a shield if there is no probabition to exceed was?

- Deveral Peruts have this general prohibition of was
- Dres Federal Low allow for enforcement of Operating limit?

 EPA does not trute they can enforce operating limit.

 Adding probabition on violating was helps this issue.
- "Build what you say" Any requests for changes made after
 peint is issued is subject to peint mod. Add
 more or clarifying language. (for changes made
 during construction)

Wisconsin - has limits of "language to drop" if the lasts are being met the permittee can petition to drop limits.

- EBA de also concerned about timely reissuance.

- Wisconsin or other state can drop limits based on data

	EPA/MPCA	9/26/18
/ []	EPA - Would PCA consider operating limits for Metals.	
	Look at where infruent is higher tra Was.	
	(As, Co, Cu, Pb, Ni, Hondness, Soy) - A	Also Hy (EPA concern)
	Surface water monetary - is tress conducting in stress	/ tubetures?
	Yes - either tworgh pent or Consent De	ere
	- At me site there are not a lot of trul	etures - use Partridge 1.
	- Frants Enguery corridor - has trubutury	
	For PolyMet: Operational limits - metals + Hy	
	was larguage	
P. 32		
V []	look at permit re-opener language	
	For EPA:	
	- Permit & Fact Sheet - mid Oct (pre-proposed)	- 45 day review
		15 day review
	- Send comments as they are finished	
	Allovable Pischage	
	- Actual difference (precip - evaporation) + carryover year	N. M. Bress at Maria
٥. 🏻	Els projected 1.9 billion Alaska approach 4	
p.40	Consider adding from limit/volume limit calculated on Alaska approach	
1,30,10		
	- Add narrative for volume, don't include in L &	
	A 14 a 4	volume limit
		juage to
		eact Sheet
3	F	-act sheet
	741	8

EPA/MPCA 9/26/18 Adaptive Management · Clarify - adjust as you go to prevent volutions." - Make more clear this is not in response to violation, but to prevent Stormweter - Carem about peut releuse - What kind of montay will be done to make sine truy are couplying of "don't violate was." provision? - Pent me - has separal busins to control Hy - CSV- how do SUPPS welade montay - Should SWPPP welade regeneret of temporary basins - Hy controlled uf solids - EPA wants to consider monitory - though 401 cent? - May showing acreages + where trungs are covered - Sweps are very detailed - Can tre Hy concern be addressed by the sweps + make it part of 401 cert? - Concerned about 401A2 - need something in 401 cert for potential downstream impacts - Need to show how to monitor or control downstream Hy impacts (401A2 concern) Allowable Discharge I - PCA will consider volume statement in permit text Operating Limits 1.46 - Jeff vill call EPA re: additional operating lints

	PolyMet 10/1/18
	WET - w/ quarterly will it be permit violation if they end up in TRE/TIE?
П	- TRE language has quarterly monitoring rey, Should tris be changed to more frequently?
. П	Operating Limits (As, Co, Pb, Ni, Cu, Soy) - Monthly avg (of weekly surples) - Mercury - add Hg operating limit Was-monthly avg.
•	- add MMP luqueye + Hy operating limit
	- at what point would engineery design trigger a permt mod? - Compan proposes removey super specific change language. Y Need additional discussion
I	Toward Gradient - Company has updated nevised calculations for truel time. More detailed / realistic calculations Barr is updating memo.

=	
PolyMet	10/1/18
HRF - evaluation will be required re:	sentablety of nonetoring
n HRF Liner Plan	
Pre-Proposed Permit - EPA has 45 days	
	(E. b. End andring)
Proposed Permit - 15. days	(Entire Final puckage)
	SV
CSH CONCENT (COA)	
CSW Concern (EPA)	4-
- Compay is montory Hy downstream - n	
- sed ponds will control CSW + :	
- TMDL afutes stouwater as de-mini	mus for Hg.
- Conpay has meno truy sent to	DNR
- All dewatery water collected che	my excuration to frented
* * *	
To Pe / Outstanding Hems for potential updates	
- Exceedance - To C - does the TRE/TIE re	gale violations?
- Build what's in the app	
- Inward gradient. Barr is updating calcula	tions
and a grant to the specific of	
	3

EPA Call 10/22/18 Monthly and of weekly sumples - Operating Limit + Get this limit type int Tempo. - Moving any No sulfate can be added - did we make other prohibitions? Stormwater - will be covered under General Peruts - SWPPP have been subutted for ISW - Saturated soils - water will be purped to WWTS area (TB) OSLA - welades pents WABEL = - EPA will focus review on proposed lunguize re; WEBERS 45-day review followed by 15-day review. I Set up check in 2-weeks after they receive pre-proposed to permit Mark Ackerman - lead reviewer

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DECLARATION OF JEFF UDD

Appellate Case Nos. A19-0112 A19-0118 A19-0124

I, JEFF UDD, in accordance with section 358.116 of the Minnesota Statutes and rule 15 of the Minnesota Rules of General Practice, declare as follows:

Background

- 1. My job title is Manager of the Water and Mining Section for the Minnesota Pollution Control Agency ("MPCA"). I have been employed by MPCA since February 2002.
- 2. My job responsibilities have included oversight of developing and drafting National Pollutant Discharge Elimination System/State Disposal System Permit No. MN0071013 ("Water Permit").
- 3. I was involved in oversight of the Water Permit from January 2018 until issuance on December 20, 2018. During this period I also participated in regular meetings and conference calls with EPA, including the April 5, 2018, telephone call with EPA referenced in WaterLegacy's May 17, 2019, Motion for Transfer to the District Court or, in the Alternative, for Stay Due to Irregular Procedures and Missing Documents ("Motion") and in its June 7, 2019, Reply in support of the Motion.

4. I submit this Declaration to the Court based on my personal knowledge and in support of MPCA's Sur-reply to WaterLegacy's Motion.

Responses to Questions Raised in WaterLegacy's Reply

- Regional Administrator Stepp to prevent EPA Region 5 professional staff from sending the written comments they had prepared." WaterLegacy Reply, at 19 ¶ 1. First, I have no knowledge of whether Regional Administrator Stepp prevented professional staff from sending written comments. EPA has discretion whether or not to submit written comments, and I do not know why EPA did not submit any. I also have no knowledge of any communications between MPCA Commissioner John Linc Stine and EPA Administrator Cathy Stepp about alleged complaints with EPA's written comments.
- 6. Second, I did not participate, witness, or hear about any MPCA or EPA efforts to suppress the written comments prepared by EPA staff, nor did the lack of written comments concern or surprise me. As we processed written public comments from relators and others, we knew that we would be making changes to the draft version of the permit that was the subject of the April 5, 2018, conference call. As I understood it, rather than submitting comments on a draft of the permit that was going to be changed anyway, it would make more sense and be more efficient for EPA to comment on the post-comment version of the permit. It would have been inefficient for EPA to comment on a version of the draft Permit that we intended to change in response to written public comments, so it was not surprising to me that EPA did not submit its written comments on that version of the draft Poly Met Permit.

- 7. Jeffrey Fowley's declaration in support of WaterLegacy's Reply cites to my email in which I wrote, in reference to a phone conversation I had with EPA's Kevin Pierard, "[Kevin] would like to have [a phone call] the first week of April to walk through what the letter would have said if it were sent." See id. (Fowley Decl., Ex. 1). Mr. Fowley quotes this exchange apparently to show that MPCA was trying "to prevent EPA written comments from being sent at that time." See id. (Fowley Decl.), at 7. Mr. Fowley misinterprets the context of this exchange. The March 16, 2018, email is dated the day the public-comment period ended. Therefore, we knew that EPA had not submitted written comments during the public-comment period. The plan for EPA feedback is reflected in the email exchange: we knew that we were going to change the permit in response to written public comments, so rather than respond to duplicative comments that EPA would have sent on a version of the draft permit that we were going to change anyway, the more efficient process was for EPA to review the post-comment, pre-proposed draft, the version of the Poly Met Permit that had been changed to reflect our responses to public comments. We agreed to give EPA up to 60 days to respond to that revised draft. The April 5, 2018, call was therefore about the issues that EPA had previously raised with earlier drafts of the Poly Met Permit and, as I interpreted it, what EPA would be looking for in evaluating the adequacy of the pre-proposed draft.
- 8. The pre-proposed permit was sent to EPA on October 25, 2018. Mr. Pierard later called me during the review of the pre-proposed permit, and said that EPA did not need the whole 45 days to review it. They had evaluated it and asked that we send them the (nearly identical, except for corrections for typos) proposed permit, which triggered the

15-day review under the Memorandum of Agreement between MPCA and EPA. We sent the proposed permit to EPA on December 4, 2018. On or about December 18, 2018, Mr. Pierard said that EPA did not object to the permit, and MPCA could make its final determination on issuance of the permit. We issued it within days of EPA's report that EPA had no objections.

- 9. WaterLegacy asks whether the "purpose of these actions" was to "prevent the creation of a written record disclosing EPA's criticisms" on the Poly Met Permit. *See id.* ¶ 2. First, I have no knowledge of any "actions" anyone took to prevent EPA's criticisms from making it into the administrative record. To my knowledge, all notes MPCA staff took from the twice-monthly conference calls or meetings with EPA were included in the Data Practices Act ("DPA") releases and in the administrative record, so long as those notes were not privileged. All of the substantive notes of conversations with EPA that we relied on in developing the Poly Met Permit are included in the administrative record.
- over the phone on the April 5, 2018, conference call. *See id.* ¶ 3. The comments EPA read over the phone were duplicative of the feedback we had received from EPA throughout the permit-development period and are thus memorialized in the notes and other material included in the administrative record. EPA's comments were also duplicative of the written comments we received from the public during the public-comment period. We responded to these written comments in our responses to comments, so EPA's concerns, and our responses to them, are included in the administrative record.

- 11. On the call, it was clear that EPA was reading from a document, but we had no advance notice that this would be the nature of the call. I was surprised because all of our previous discussions were deliberative, and I expected that the call would consist of working through a handful of issues that EPA wanted us to focus on in responding to public comments. Here they just read comments to us, and there was little, if any, discussion. I was expecting a discussion. EPA staff read the comments very quickly, which accounts for why there were no substantive notes taken on this call, other than those taken by MPCA staff attorney Mike Schmidt.
- 12. WaterLegacy asks what happened to the notes taken at the April 5, 2018, conference call with EPA. *See id.* ¶ 4. I did not take notes during this call. It was my general practice not to take notes. No one ever directed or encouraged me, or (to my knowledge) any other MPCA staff member, to not take notes or to not retain notes that were taken.
- 13. WaterLegacy asks whether other notes of MPCA-EPA communications exist that were not retained. *See id.* ¶ 6. To my knowledge, all of the notes that were subject to release under the DPA or subject to inclusion in the administrative record have been treated accordingly. Furthermore, much of the substantive contents of the notes that MPCA included in the administrative record were worked into the final fact sheet and statement of basis, where MPCA explained the purpose and underlying substantive basis for the terms of the Poly Met Permit.
- 14. WaterLegacy asks whether MPCA staff was ever directed not to create or retain notes from its discussions with EPA. See id. at 20, ¶ 7. Again, I never took notes,

and I have never heard anyone discuss not taking or retaining notes of MPCA-EPA discussions.

- November 3, 2016, any letters or emails memorializing conversations or meetings, or the resolution or failure to resolve points of concern. *See id.* ¶ 8. To my knowledge, we never received any letters or emails memorializing any discussions with EPA or the resolution—or lack thereof—of any criticisms EPA raised about the Poly Met Permit.
- that Poly Met's permit application had been cured of its deficiencies and was complete. See id. ¶ 9. I am not aware of any letters or emails from EPA memorializing anything substantive about the provisions of the Poly Met Permit application at any point in the permit-development process.
- 17. WaterLegacy asks whether MPCA discussed internally how to respond to EPA's April 5, 2018, oral comments. *See id.* ¶ 10. I never participated in any discussions about how to respond to EPA's oral comments. We did not think to attribute EPA's comments specifically, because they were not written comments. Having heard EPA's oral comments and read the public's written comments, I knew that EPA's comments overlapped with the public comments, so we knew that we had addressed them in our responses to comments. We knew that when we replied to the written public comments, we would have necessarily replied to EPA's comments.

I declare under penalty of perjury that everything I have stated in this document is true and correct.

Dated: June 12, 2019 Ramsey County St. Paul, Minnesota

Jeff Udd

Manager, Water and Mining Section Minnesota Pollution Control Agency

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STATE OF MINNESOTA IN COURT OF APPEALS

In the Matter of the Denial of Contested Case Hearing Requests and Issuance of National Pollutant Discharge Elimination System/State Disposal System Permit No. MN0071013 for the Proposed NorthMet Project St. Louis County Hoyt Lakes and Babbitt Minnesota

DECLARATION OF JEFF UDD

Appellate Case Nos. A19-0112 A19-0118 A19-0124

I, JEFF UDD, in accordance with section 38.116 of the Minnesota Statutes and rule 15 of the Minnesota Rules of General Practice, declare as follows:

Background

- 1. My job title is Manager of the Water and Mining Section for the Minnesota Pollution Control Agency ("MPCA"). I have been employed by MPCA since February 2002.
- 2. My job responsibilities have included oversight of developing and drafting National Pollutant Discharge Elimination System/State Disposal System Permit No. MN0071013 ("Water Permit") for the Poly Met NorthMet Mine Project.
- 3. I was involved in oversight of the Water Permit from January 2018 until issuance on December 20, 2018. I also participated in regular meetings and conference calls with EPA during this time period, including the April 5, 2018, telephone call with EPA referenced in WaterLegacy's May 17, 2019, Motion for Transfer to the District Court or, in the Alternative, for Stay Due to Irregular Procedures and Missing Documents ("Motion").

4. I submit this Declaration to the Court based on my personal knowledge and in support of MPCA's Response to WaterLegacy's Motion.

MPCA and EPA Process and Procedures to Arrive at the Terms of the Water Permit

- 5. I participated in the April 5, 2018, conference call between MPCA and EPA in which EPA read from its written comments. EPA summarized all of the issues it had previously raised about the pre-public comment draft permit. My impression of this set of summary comments was that EPA was alerting MPCA to the issues it would be looking at most carefully when MPCA responded to the public comments. As of April 5, 2018, most of these issues had been discussed, but some had not been finally resolved.
- 6. After the April 5 call, MPCA focused on finishing all of its draft responses to significant public comments and EPA's concerns, so it could discuss all of the issues with EPA.
- 7. That comprehensive discussion, which was the culmination of the entire collaboration between MPCA and EPA on the Water Permit, took place at a two-day, inperson meeting with EPA on September 25 and 26, 2018, where MPCA explained to EPA how it was addressing all of the substantial public comments it had received during the public-comment period and how MPCA was addressing EPA's concerns with the draft permit that EPA had repeated in the April 5, 2018, conference call.
- 8. There was a lot of discussion during the two-day meeting. MPCA agreed to add new operating limits for cobalt and mercury. MPCA also agreed to add express language prohibiting discharges from violating water quality standards. EPA expressed

satisfaction with the results of the meeting. At the conclusion of the meeting, I believed that no unmanageable issues remained, and we were in a position to finalize the draft permit.

- 9. Under the Memorandum of Agreement ("MOA") between MPCA and EPA, once MPCA has completed a "proposed" permit—which in this context refers to a post-public-comment draft permit—MPCA sends the proposed permit to EPA, and it is this version that EPA officially comments on. The MOA allows EPA 15 days to decide whether or not to veto the proposed permit.
- 10. On October 25, 2018—a month after the September 25-26 meeting—MPCA sent a pre-proposed version of the permit to EPA. The pre-proposed permit reflected all of the discussion points from the two-day, in-person meeting in September 2018. While the May 1974 Memorandum of Agreement ("MOA") between MPCA and EPA provides for a 15-day period for EPA to object to (veto) the issuance of a proposed NPDES permit, EPA requested an extra 45 days from October 25, 2018, to review this pre-proposed version of the permit, and MPCA agreed to the extended review period.
- 11. It turned out that EPA did not need the entire 45 extra days. On December 4, 2018, EPA notified MPCA that it was ready to begin its 15-day review of the proposed permit. Thus, rather than the required 15-day review under the MOA, MPCA agreed to extend EPA's review to 60 days total. During this 60-day review period, EPA did not veto or otherwise object to the permit.
 - 12. MPCA issued the final Water Permit and fact sheet on December 20, 2018.

Dated: May 28, 2019 Ramsey County St. Paul, Minnesota

Jeff Udd

Manager, Water and Mining Section Minnesota Pollution Control Agency

STATE OF MINNESOTA MINNESOTA POLLUTION CONTROL AGENCY

IN THE MATTER OF THE DENIAL OF CONTESTED CASE
HEARING REQUESTS AND ISSUANCE OF NATIONAL
POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE
DISPOSAL SYSTEM PERMIT NO. MN0071013
FOR THE PROPOSED NORTHMET PROJECT
ST LOUIS COUNTY
HOYT LAKES AND BABBITT MINNESOTA

FINDINGS OF FACT
CONCLUSIONS OF LAW
AND ORDER

FINDINGS OF FACT

This matter involves the issuance of the NPDES/SDS Permit MN0071013 to Poly Met Mining, Inc. for the NorthMet Project. During the public comment period, the MPCA received four requests for a contested case hearing on the NPDES permit. The MPCA must decide under applicable statues and rules whether to grant or deny, in whole or in part, the requests for a contested case hearing. Based on the MPCA staff review, comments and information received during the comment period, and other information in the record of the MPCA, the MPCA issues the following Findings of Fact, Conclusions of Law, and Order:

Facility History

Overview

1. Poly Met Mining, Inc. (PolyMet) proposes to develop a copper-nickel-platinum group elements mine and associated processing facilities. The Project consists of the Mine Site, the Plant Site, and the Transportation and Utility Corridors that connect them. The Mine Site is a relatively undisturbed site that will be developed into an open pit mine. It is located approximately six miles south of the city of Babbitt and two miles south of the Northshore Mining Company's active, open pit taconite mine (known as Northshore Mining's Peter Mitchell Mine). The Plant Site is located at the former LTV Steel Mining Company (LTVSMC) / Cliffs Erie L.L.C. (Cliffs Erie) taconite processing facility located approximately six miles north of the city of Hoyt Lakes and will include refurbished and new ore processing and waste disposal facilities. The Mine Site and the Plant Site are connected by an approximately 7-mile-long Transportation and Utility Corridor, which will include new and upgraded infrastructure to link activities at the Mine Site and Plant Site.

Environmental Review

2. The proposed NorthMet Project underwent environmental review between 2005 and 2015. A Final Environmental Impact Statement was prepared and public comments were addressed in 2015. The Final Environmental Impact Statement was deemed adequate by the Minnesota

Findings of Fact Conclusions of Law And Order

Department of Natural Resources on March 3, 2016. The Final Environmental Impact Statement was not challenged by any party.

The Proposed Project

- 3. On July 11, 2016, the MPCA received a permit application from Poly Met Mining, Inc. for a NPDES/SDS permit authorizing discharges from a proposed wastewater treatment system (WWTS) for its proposed copper-nickel-platinum group elements mine and associated processing facilities. The permit application was updated in November 2016 and again in October 2017. The following is a summary of the proposed project.
- 4. The proposed Mine Site is a relatively undisturbed area that will be developed into an open pit mine. Development of the Mine Site for the Project will include construction of new facilities, including mine pits, ore handling facilities, waste rock stockpiles, an overburden storage area, mine water management systems, an equalization basin area, and supporting infrastructure.
- 5. The proposed Plant Site is located approximately 7 miles west of the Mine Site. It is on developed land that includes a former taconite processing facility and tailings basin previously operated by LTVSMC. Redevelopment of the Plant Site for the Project will include refurbishment of former LTVSMC processing facilities and construction of new facilities. The existing tailings basin will be refurbished for use as a Flotation Tailings Basin (FTB).
- 6. Wastewater generated at the Mine Site will be collected, stored in equalization basins and routed for treatment at the proposed wastewater treatment system (WWTS) located at the Plant Site. All wastewater generated at the Plant Site will also be collected and treated by the WWTS or routed to the existing tailings basin and used in the processing plant.
- 7. A seepage containment system (also referred to as a seepage capture system) will be constructed at the FTB located at the Plant Site. Seepage from the northern, northwestern, western, and eastern sides of the FTB will be collected by the FTB Seepage Containment System, and seepage from the southern side of the tailings basin will be collected by the FTB South Seepage Management System (collectively known as the FTB seepage containment systems). The FTB seepage containment systems will collect water seeping from the Tailings Basin via surface or shallow groundwater flow.
- 8. The FTB Seepage Containment System will consist of a cutoff wall (a low permeability hydraulic barrier) placed into the existing surficial deposits and keyed into the underlying bedrock, with a drainage collection system installed on the upgradient (inward) side. The drainage collection system will have a collection trench filled with granular drainage material and a perforated drain pipe located near the bottom of the trench. Vertical risers extending above ground surface from the drain pipe will collect runoff and surface seepage upgradient of the cutoff wall. The containment system will be operated to maintain an inward hydraulic gradient, which will prevent the outward migration of the captured seepage.

Findings of Fact Conclusions of Law And Order

- 9. The FTB South Seepage Management System, a variation of which currently exists as the SD026 pumpback system, consists of a berm, trench, and pumpback system. The existing system collects seepage on the southern side of the FTB and will be upgraded as part of the project.
- 10. Water collected by the FTB seepage containment systems will be pumped to the WWTS for treatment and discharged via surface water discharge outfalls as described below. Some seepage will also be returned directly to the FTB Pond for reuse in the processing facilities.
- 11. The WWTS will be located at the Plant Site and will house the process equipment for two separate treatment trains known as the mine water treatment trains and the tailings basin seepage treatment train. Ancillary components of the WWTS will include the equalization basin area located at the Mine Site, the mine-to-plant pipelines (MPP), and the WWTS building and associated pretreatment basin.
- 12. The WWTS will treat mine water and FTB seepage. Mine water flows will be segregated based on projected water quality or waste strength and treated in two mine water treatment trains. The mine water chemical precipitation train will treat high-concentration mine water and also treat WWTS membrane treatment concentrate. The mine water filtration train will treat low-concentration mine water using membrane separation. Treated water from the mine water treatment trains will be routed to the FTB, so it would be further treated before any discharge to a receiving water, as described below.
- 13. Separately, the WWTS will also treat tailings basin seepage using a combination of membrane separation treatment technologies (such as reverse osmosis and/or nanofiltration). The WWTS discharge from the tailings basin seepage treatment train (WWTS discharge) will be routed to multiple outfalls to disperse the discharge so as to maintain wetland hydrology and stream flows in Trimble Creek, Second Creek, and Unnamed Creek.
- 14. Treated tailings basin seepage will be routed to the treated water storage tank (SD001), where effluent water quality will be monitored. From there the effluent will be pumped to the individual surface water discharge outfalls located in the headwaters of each of the receiving surface waters. Outfalls SD002 and SD003 discharge to headwater wetlands of Unnamed Creek, Outfalls SD004 through SD010 discharge to headwater wetlands of Trimble Creek, and Outfall SD011 discharges to the headwater segment of Second Creek. The WWTS discharge will be distributed to these tributaries in proportion to the flow required to minimize hydrologic or ecologic impacts resulting from the reduction in available source water to the streams from installation of the FTB seepage capture systems. The flow rate to each outfall will be monitored in the distribution box where the treated effluent from SD001 is divided to the individual outfalls. The average total discharge flow rate from the WWTS is expected to range from approximately 2.4 million gallons per day in mine year 1 to approximately 3.9 million gallons per day in mine year 10, the year of maximum discharge.
- 15. The wetland headwaters to Unnamed and Trimble Creeks are Class 2D, 3D, 4C, 5, and 6 waters under Minn. R. 7050.0425 and the headwater segment of Second Creek is a Class 2B, 3C, 4A, 4B, 5, and 6 water under Minn. R. 7050.0430.

Findings of Fact Conclusions of Law And Order

Community Involvement in the Permitting Process

- 16. The MPCA, in cooperation with the Minnesota Department of Natural Resources ("MDNR"), developed a web portal for the PolyMet NorthMet Project. The portal was designed to give interested parties one place to find information regarding the proposed project as well as sign up for email updates. The MPCA provided links to the permit application, updated supplemental permit applications, supporting documentation and reports via the portal.
- 17. The MPCA sent an initial email message to interested parties when it received each of the three permit applications (NPDES/SDS, 401 Certification and Air Quality). MPCA also emailed quarterly updates regarding progress on the permitting process.
- 18. The MPCA provided the draft NPDES/SDS permit package via email to a number of involved or interested Tribal entities on January 17, 2018, two weeks before the start of formal public notice, to provide additional time for their review of the permit and certification packages. Tribal entities involved in this early review period included the Fond du Lac Band of Lake Superior Chippewa, the Grand Portage Band of Chippewa, the Bois Forte Band of Chippewa, the Leech Lake Band of Ojibwe, the Red Cliff Band of Lake Superior Chippewa Indians, the 1854 Treaty Authority, the Great Lakes Indian Fish and Wildlife Commission, and the Minnesota Chippewa Tribe. At this time the MPCA also provided the draft permit and certification packages to the United States Environmental Protection Agency ("EPA") Region V.
- 19. The MPCA held public meetings on February 7, 2018, in Aurora, Minnesota, and on February 8, 2018, in Duluth, Minnesota. These public meetings were held during the public notice period. Representatives of both the MPCA and MDNR attended these meetings. They included an open house component where interested parties could ask questions and interact directly with staff. They also provided opportunities for verbal comments to be recorded and for submission of written comments.

Procedural History

- Pursuant to Minn. R. 7001.0100, the MPCA issued a public notice on January 31, 2018, of the MPCA Commissioner's preliminary determination to issue the draft NPDES/SDS Permit MN0071013.
- 21. The MPCA notified the public of the public comment period. The draft NPDES/SDS Permit, Fact Sheet, draft 401 Certification, and public notice documents were made available for review on the MPCA website at https://www.pca.state.mn.us/public-notices. On January 31, 2018, the MPCA provided a news release to 8490 recipients who subscribed to the PolyMet's NorthMet Mining Project News. In addition, the draft NPDES/SDS Permit, Fact Sheet, draft 401 Certification, and public notice documents were made available for review via the web portal at https://www.pca.state.mn.us/quick-links/water-quality-permit-northmet. The public notice was also advertised in local newspapers.

Findings of Fact Conclusions of Law And Order

- 22. The MPCA provided a public notice in advance of the two public meetings for the Project that were held on February 7 and February 8. The public notice for the public meetings was published in the Mesabi Daily News, the Duluth News Tribune, and the Babbitt Weekly on January 5, 2018.
- 23. The public comment period for the proposed NPDES/SDS permit and 401 Certification ended on March 16, 2018. During the 45-day comment period, the MPCA received four requests for contested case hearings on the NPDES/SDS permit. In addition, the MPCA received a total of 686 comment submittals from government agencies, Tribal Parties, environmental groups, and individual citizens. The 686 comment submittals were then reviewed and organized by their respective program/regulatory matter. This resulted in approximately 1600 individual comments relevant to the NPDES/SDS permit.
- 24. The MPCA prepared responses to the contested case hearing requests received during the 45-day public comment period. The contested case hearing requests and detailed responses to the issues raised in the contested case hearing requests are incorporated by reference as Attachment A to these findings.
- 25. The MPCA also prepared responses to the individual comments received during the 45-day public comment period. The individual comments were reviewed for substantive comment on permit conditions. Those without substantive comment were assigned a thematic response based on the general theme of the comment. Submissions with substantive comment were responded to individually, with a response that directly addressed the comment raised. The individual comments and responses, whether thematic or individual, are incorporated by reference, also in Attachment A to these findings.

EVALUATION OF THE REQUESTS FOR A CONTESTED CASE HEARING

- 26. The public comment period for the draft permit began on January 31, 2018, and ended on March 16, 2018. During the 45-day comment period, the MPCA received four petitions for a contested case hearing on the draft NPDES/SDS permit.
- 27. The MPCA received petitions requesting a contested case hearing on both the NPDES/SDS permit and the 401 Certification from the following parties:
 - a. A joint petition from Save our Sky Blue Waters, Save Lake Superior Association and Wetlands Action Group;
 - b. WaterLegacy; and
 - c. Rich and Carol Staffon, Citizens.
- 28. The MPCA received a joint petition requesting a contested case hearing on the NPDES/SDS permit from the Minnesota Center for Environmental Advocacy (MCEA), the Center for Biological Diversity (CBD), and Friends of the Boundary Waters Wilderness (FBWW).

Findings of Fact Conclusions of Law And Order

- 29. The rule language applicable to contested case hearing requests references both the Board and Commissioner. The Minnesota Legislature eliminated the MPCA Citizens' Board effective July 1, 2015. (2015 Minn. Laws 1st Sp. Sess., ch. 4.) The June 2015 Citizens' Board meeting was the final meeting of the Citizens' Board. Therefore, the MPCA Commissioner will make the final decision concerning the contested case hearing requests.
- 30. Minn. R. 7000.1800, subp. 2(A), **Contested case petition contents**, sets out the requirements for a petition for a contested case hearing as follows:

A petition for a contested case hearing shall include the following information:

- (1) A statement of reasons or proposed findings supporting a board or commissioner decision to hold a contested case hearing pursuant to the criteria in part 7000.1900, subpart 1; and
- (2) A statement of the issues proposed to be addressed by a contested case hearing and the specific relief requested or resolution of the matter.
- 31. Minn. R. 7000.1800, subp. 2(B) states:

To the extent known by the petitioner, a petition for a contested case hearing may also include the following information:

- A proposed list of prospective witnesses to be called, including experts, with a brief description of the proposed testimony or summary of evidence to be presented at a contested case hearing;
- (2) A proposed list of publications, references, or studies to be introduced and relied upon at a contested case hearing; and
- (3) An estimate of the time required for petitioner to present the matter at a contested case hearing.
- 32. The MPCA notes that while the information specified in Minn. R. 7000.1800, subp. 2(B) is not required in a contested case hearing petition, it is information that is helpful to the MPCA as it considers whether a hearing will aid the MPCA commissioner in making a final decision.
- 33. The MPCA decision whether to grant the petition is governed by Minn. R. 7000.1900, subp. 1, **Board or commissioner decision to hold contested case hearing**, which states:

The board or commissioner must grant the petition to hold a contested case hearing or order upon its own motion that a contested case hearing be held if it finds that:

- A. there is a material issue of fact in dispute concerning the matter pending before the board or commissioner;
- B. the board or commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and

Findings of Fact Conclusions of Law And Order

- C. there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the board or commissioner in resolving the disputed facts in making a final decision on the matter. Minn. R. 7000.1900, subp. 1.
- 34. In order to satisfy the first criterion, Minn. R. 7000.1900, subp. 1(A), the hearing requester must show there is a material issue of fact in dispute as opposed to a disputed issue of law or policy. A fact is material if its resolution will affect the outcome of the case. O'Malley v. Ulland Brothers, 549 N.W.2d 889, 892 (Minn. 1996).
- 35. In order to satisfy the second criterion, Minn. R. 7000.1900, subp. 1(B), the requester must show that the MPCA has jurisdiction or authority to make a determination on the disputed issues of material fact. "Agencies are not permitted to act outside the jurisdictional boundaries of their enabling act." Cable Communications Board v. Nor-West Cable, 356 N.W.2d 658, 668 (Minn. 1984). Therefore, each issue in the contested case request must be within the MPCA's authority to resolve.
- 36. Finally, under Minn. R. 7000.1900, subp. 1(C), "petitioners for a contested case hearing have the burden of demonstrating the existence of material facts that would aid the agency in making a decision before they are entitled to a contested case hearing." Matter of Solid Waste Permit for the NSP Red Wing Ash Disposal Facility, 421 N.W.2d 398, 404 (Minn. Ct. App. 1988). The Minnesota Supreme Court has recognized that to meet this standard, "[i]t is simply not enough to raise questions or pose alternatives without some showing that evidence can be produced which is contrary to the action proposed by the agency." In the Matter of Amendment No. 4 to Air Emission Facility Permit, 454 N.W.2d 427, 430 (Minn. 1990).
- 37. The MPCA evaluated the requests for a contested case hearing by examining each of the issues raised in the petitions received, to determine if the petitions met each of the three criteria required in Minn. R. 7000.1900, subp. 1.

MPCA FINDINGS WITH RESPECT TO EACH OF THE CONTESTED CASE HEARING CRITERIA

- 38. The contested case hearing requests for the NPDES/SDS permit and 401 certification submitted by MCEA et al., Save our Sky Blue Waters et al., and WaterLegacy were timely and included all of the information required by Minn. R. 7000.1800, subp. 2(A). The issues outlined in these petitions are addressed below.
- 39. The hearing request received from Rich and Carol Staffon did not contain the information required by Minn. R. 7000.1800, subp. 2(A). However, a number of issues raised in the Staffon request were contained in the requests made by MCEA, et al., and WaterLegacy. These issues can be found in Attachment A.
- 40. A number of issues fall under the jurisdiction of the MDNR and are not under the jurisdiction of the Commissioner. These issues are identified in the responses contained in Attachment A and are not addressed further by this document.

Findings of Fact Conclusions of Law And Order

MPCA Consideration of the Contested Case Hearing Requests

41. The following is a summary of the petitioners' comments regarding the NPDES/SDS permit and the MPCA's responses. Further details of each issue and the agency responses are contained in Attachment A to these Findings of Fact.

The draft permit does not adequately minimize groundwater contamination. (MCEA et. al.)

The MPCA has not prohibited discharges to the groundwater in this permit. (MCEA et al.)

- 42. The Petition quotes permit language that provides, "[e]xcept for discharges from outfalls specifically authorized by this permit, overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, are prohibited," but alleges that in fact the MPCA has not prohibited discharges to the groundwater in this permit.
- 43. The MPCA disagrees with the conclusion reached by the petitioners. The permit includes specific authorized discharge points (SD002-SD011). It does not authorize any other point source discharge and in fact prohibits direct discharge to surface waters from the mine site and plant site. The comment quotes permit language that directly contradicts the conclusion of the comment, that other discharges are not prohibited ("other releases of wastewater or materials to the environment, whether intentional or not, are prohibited"). The comment does not provide a basis to conclude the permit language has no effect. See response to Comment Water-703.
- 44. The MPCA finds that this comment raises a legal issue, and there is no reasonable basis for the Petitioners' position. The comment quotes permit language that directly contradicts the comment's conclusion and the comment identifies no new information. Therefore, the MPCA finds that the criterion at Minn. R. 7000.1900, subp. 1(C) is not satisfied because holding a contested case hearing would not aid the commissioner in making a decision.

It is unclear upon what basis the MPCA concludes degradation is minimized (MCEA et al.)

- 45. The Petition alleges that there is not adequate basis for the MPCA to conclude that groundwater degradation is minimized by the permit conditions. The Petition raises concerns that the design is flawed and the final design is unknown.
- 46. The MPCA relied on its technical review of the permit application and plans submitted by the applicant to determine whether the proposed systems will adequately minimize the potential degradation. The MPCA has reviewed the available information, including the permit application and associated reports. MPCA's review included an engineering review to evaluate the functionality of the proposed systems. The MPCA concluded that the permit conditions can be met and the engineering controls can be expected to function as designed. See response to Comment Water-703-A.

Findings of Fact Conclusions of Law And Order

- 47. Although the comment questions the engineering conclusions reached by the MPCA, it does not provide a factual basis for disputing those conclusions. The comment cites the surface water antidegradation review, when in fact the groundwater nondegradation review addressed the issues regarding potential groundwater contamination raised by the commenter.
- 48. The MPCA finds that the comment raises a factual issue; however, no new information on this issue is identified, so there is no reasonable basis underlying the disputed facts. In addition, the MPCA has adequately addressed the issue. Therefore, a contested case hearing would not aid the Commissioner in making a final decision on the matter and the criterion in Minn. R. 7000.1900, subp. 1(C) is not satisfied.

There is an inadequate monitoring system and no limits for groundwater and these inadequacies cannot be justified by after-the-fact studies (MCEA et al.)

- 49. The Petition alleges that, as currently designed, the components will not function as designed to minimize contamination of the groundwater, the monitoring system is inadequately designed and will not identify problems if they do occur, and that the Permit contains no limits for groundwater.
- 50. As described in paragraph 46, the MPCA reviewed the functionality of engineering controls. As described in paragraph 43, the Permit does not authorize a discharge to groundwater, so a permit limit is not appropriate.
- 51. As further described in paragraphs 68 through 76, the MPCA also considered the adequacy of groundwater monitoring. The permit requires an Annual Comprehensive Performance Evaluation Report, which must evaluate the effectiveness of each of the major engineering controls (i.e., seepage containment systems, stockpile liner systems, equalization basins) based on all relevant monitoring and performance data, and must identify any adaptive management needed to prevent impacts to water resources. The incorporation of adaptive management as a failsafe does not invalidate the requirements for compliance. Adaptive management is regularly required in complex environmental scenarios to ensure that standards will be met.
- 52. The comment states the commenter's opinion and contains interpretation of the requirements in the permit. Neither aspect is a disputed factual issue. The comment does not identify any specific new facts. Because it does not raise a material issue of fact, the MPCA finds that a contested case hearing is inappropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

Waste rock characterization and groundwater modeling relied on unsupported and unreasonable assumptions. (MCEA et al.)

- 53. The Petition alleges the MPCA used unsupported assumptions regarding the contamination generated by waste rock and regarding groundwater behavior.
- 54. As described in response to Comments Water-705 and Water-706, this comment is predicated on what was submitted as new hydrogeologic modeling by the Petitioners. Similar modeling was submitted by the petitioners during the environmental review process. The MDNR, through its third

Findings of Fact Conclusions of Law And Order

party consultant, completed a detailed review of the modeling. The MDNR did not agree with various assumptions in the Petitioners' modeling and determined the Environmental Impact Statement (EIS) modeling was valid.

- 55. The MPCA has considered the assumptions made in the submitted hydrogeologic modeling in coordination with MDNR. The MPCA determined that the issues Petitioners raised are not based on new information, but rather a repackaging of information considered during the EIS process. The Petitions raise the same issues on this subject that were specifically addressed by the MDNR in the response to Comments on the Supplemental Draft EIS and Final EIS.
- 56. The petitions raise the same issues that were considered during the EIS process. The issue of waste rock characterization and the prediction of mine pit and waste rock geochemistry was thoroughly addressed in the EIS process and the MPCA participated in discussions on this topic during the EIS development. The EIS was deemed adequate and the comment does not present a basis to negate the EIS conclusions. Furthermore, waste rock characterization and the prediction of geochemistry are addressed in rules and regulations administered by the MDNR.
- 57. The MPCA finds the Petitioners' question of MPCA's assumptions made during hydrogeologic modeling does not satisfy the criterion in Minn. R. 7000.1900, subp. 1(C), because there is not a reasonable basis underlying the alleged factual dispute, new information is not identified, and a contested case hearing would therefore not aid the commissioner in making a final decision on the matter.

Design of the tailings basin and Category 1 stockpile seepage capture systems are inadequate and alternate designs need to be considered. (MCEA et al., Save Our Sky Blue Waters)

- 58. The Petitions allege the barrier walls surrounding the FTB and the Category 1 stockpile will not capture a sufficient proportion of mine-impacted surface water and/or groundwater to prevent groundwater contamination. The MCEA Petition also requests that the NPDES/SDS permit require the Permittee to "key" the barrier walls into bedrock for each seepage collection trench and install synthetic liners under the Category 1 Stockpile and FTB.
- 59. The MPCA disagrees with the allegations. Response to Comments Water-707 through Water-707-D provide a detailed discussion regarding seepage capture rates, system design and liner requirements. The barrier's primary function is not to hold back the seepage, but instead, together with pumping from the collection system, to maintain a hydraulic gradient reversal such that outward flow cannot occur.
- 60. The MPCA finds that specific comments on the design of the system included in the Petitioners' comments (such as keying the barrier into bedrock, the permeability of the barrier material and the efficiency of the collection system) were directly addressed by MDNR, with MPCA input, during the EIS process.
- 61. The MPCA added language to the permit that specifically addresses the design and construction of the FTB and Category 1 containment systems by specifying the key components of the systems that are required, including cutoff wall permeability and keying the cutoff wall into bedrock. In addition,

Findings of Fact Conclusions of Law And Order

- the MPCA has added permit language to require the submittal of as-built drawings and QA/QC test results for the systems (including barrier permeability) sufficient to document that the systems have been constructed as proposed.
- 62. The MPCA finds that although the petition raises a factual issue, the capture rate estimate and effectiveness of the barriers at the Category 1 Stockpile and FTB have been adequately addressed in the EIS. The issue has also been addressed through additional conditions in the final NPDES/SDS permit. The MPCA further finds that the information provided in the permit application is sufficient to adequately assess the likely performance of the systems. Furthermore, no new information is identified in the petition that provides a reasonable basis for a contested case hearing. Therefore a contested case hearing would not aid the Commissioner in making a final decision and the criterion of Minn. R. 7000.1900, subp. 1(C), is not satisfied.

The design requirements of the Category 2/3 and Category 4 Stockpile liners and seepage capture requirements in the draft permit are inadequate and any resulting seepage must be recaptured. (MCEA et al.)

- 63. The Petition alleges the stockpile liners and collection systems will not adequately capture contamination generated by the stored waste rock in the Category 2/3 and Category 4 stockpiles.
- 64. The MPCA disagrees with the allegations. The EIS evaluated this issue and concluded that the proposed liner systems would be sufficient to control any water potentially affected by the waste rock. The MPCA participated in the review of this issue during the EIS process and upon review of the permit application found no reason to disagree with the EIS analysis. Response to Comments Water-708 through Water-708-B provide a detailed discussion regarding design requirements, liner specifications, and requirements to capture seepage from the Category 2/3 and 4 stockpiles.
- 65. The MPCA has revised draft permit language to expressly require the Permittee to construct the Category 2/3 and Category 4 stockpile liner systems to the permeability specifications identified in the application.
- 66. The MPCA finds that although the Petition raises a factual issue, the design of the stockpile liner systems has been adequately addressed in the EIS and in the permit. The Petition identifies no new information on these issues that would warrant a contested case hearing. The revisions to permit requirements adequately address the comment without a hearing and the MPCA concludes that a contested case hearing would not aid the commissioner. Therefore, the criterion in Minn. R. 7000.1900, subp. 1(C) is not satisfied.
- 67. The MPCA finds that the issue regarding the adequacy of permit requirements to recapture seepage from the Category 2/3 or 4 stockpiles is not a factual issue, but rather is an issue of legal enforceability of permit language. The MPCA has adequately addressed this issue through permit requirements. Therefore, the criterion for a contested case hearing at Minn. R. 7000.1900, subp. 1(A), is not satisfied.

Findings of Fact Conclusions of Law And Order

Groundwater and surface water monitoring are not adequate to detect groundwater discharges reaching surface water such that corrective actions can be taken in a meaningful time period. (MCEA et al., WaterLegacy)

The process for selecting monitoring well locations was not specified. (MCEA et al.)

- 68. The Petition alleges the Applicant failed to describe how it selected the location of the monitoring wells proposed in the draft permit.
- 69. The MPCA disagrees with the allegation to the extent it questions the MPCA's rationale for well locations. Response to Comment Water-710 provides a detailed discussion regarding the basis for selecting monitoring well locations. The MPCA included the basis for wells in the fact sheet, which the comments themselves reference. The MPCA's approach was based on its own expertise and experience in developing permitting requirements, rather than the method suggested by the Petitioner's expert. There is no legal obligation for the MPCA to use a particular set of steps to determine the monitoring needed, and the process proposed in the comment would not necessarily fulfill the multiple goals of the monitoring network.
- 70. The method for determining monitoring requirements is a policy matter, not a factual matter. A "material issue of fact" is defined to exclude policy questions. Minn. R. 7000.0100, subp. 5b. Therefore, the issue does not meet the criterion for a contested case hearing at Minn. R. 7000.1900, subp. 1(A). This comment also raises a factual issue regarding justification for the selected monitoring locations, but the MPCA has adequately addressed the facts raised on this issue. There is not a reasonable basis underlying this factual issue and a contested case hearing would not aid the commissioner in making a final decision on the matter. The criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

Monitoring at the Mine Site and Plant Site is inadequate. (MCEA et al., WaterLegacy)

- 71. The MCEA Petition alleges the proposed monitoring plan at the Mine Site and Plant Site is unlikely to detect contamination into groundwater or surface water if a leak occurs because contamination plumes could pass between them. It further alleges that the draft permit fails to establish appropriate monitoring needed to determine compliance with permit conditions.
- 72. MPCA disagrees with the allegation. The responses to Comments Water-711 through Water-712-B provide a detailed discussion regarding the basis for the monitoring plan at the Mine Site and Plant Site. Critically, the allegation appears to misunderstand the purpose and function of the wells surrounding the Category 1 stockpile. The paired groundwater monitoring network at the Category 1 seepage management system consist of 13 pairs of piezometers or monitoring wells. For each pair, one well is located just inward of the hydraulic barrier and one just outward of the barrier. The primary purpose of the paired devices is to monitor for the presence and maintenance of an inward hydraulic gradient across the barrier. If the hydraulic gradient is inward, hydraulic head is greater outside the basin and water cannot escape instead, water will tend to flow into the capture system. Since the primary purpose of this network is to measure hydraulic gradient and not water chemistry, the proposed locations and spacing are appropriate and the concern in the comment is misplaced.

12 of 43

Findings of Fact Conclusions of Law And Order

- 73. The monitoring program includes monitoring of flows and water quality from various collection sumps and ponds in conjunction with the numerous proposed and existing monitoring wells. The permit does not rely solely on the downgradient well network to evaluate the performance of those controls. The proposed well network includes monitoring of both shallow and deeper portions of the surficial aquifer and of the bedrock aquifer. The MPCA is requiring this combination of monitoring to assess the environmental performance of engineering controls, including liner systems.
- 74. In addition, the permit requires an annual assessment of the suitability of the monitoring program, and requires the proposal of additional or alternative monitoring locations in the event the original program is not sufficient, based on the ongoing collection of data (including flow rates, flow direction and water quality). If the MPCA determines that additional monitoring is needed, it can modify the permit to incorporate the change.
- 75. The permit also requires surface water monitoring to assess the overall effect the project may have on downstream surface water quality and to ensure that unacceptable impacts will not occur.
- 76. The MPCA finds that the comments regarding monitoring at the Mine Site and Plant Site raise factual issues; however, the comments do not provide a reasonable basis for the dispute. Therefore, the MPCA finds that a contested case hearing would not aid the Commissioner in making a final decision on the matter and the criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.
- 77. The WaterLegacy Petition alleges the surface water quality monitoring requirements of the draft permit are insufficient to detect impacts to surface water resulting from direct discharge and discharge through groundwater to surface waters, in part because the application does not specify where affected groundwater would reach surface water.
- 78. The MPCA disagrees with the allegations. The MPCA evaluated the surface water monitoring needed at the facility in the development of the permit and determined the proposed monitoring locations were adequate to evaluate the effects of the proposed project. The comment considers the same information but reaches a different conclusion. Response to Comments Water-711-B and Multiple-543-BB through Multiple-543-BD provide further information regarding this issue.
- 79. In addition, the MPCA considered this issue as part of the permitting process. The EIS evaluated potential flow paths through groundwater to reach surface water. The permit application and the permit itself focus on the engineering controls that have been proposed to minimize the potential for groundwater to be impacted at all. The MPCA considered this information when developing permit requirements as further described in response to Comment Multiple-543-AZ.
- 80. The MPCA finds that to the extent the comment raises issues of compliance with the Clean Water Act or state law, it raises legal issues not subject to a contested case hearing pursuant to Minn. R. 7000.1900, subp. 1(A).
- 81. To the extent that the comment raises a factual issue, the comment does not identify new facts or new information for the MPCA to consider. Because it does not present new facts, there is no

Findings of Fact Conclusions of Law And Order

reasonable basis for the dispute and the MPCA finds that a hearing would not aid the commissioner in making a final decision on the matter. Therefore, the criterion in Minn. R. 7000.1900, subp. 1(C) is not satisfied.

There is no monitoring of the HRF and equalization basins. (WaterLegacy)

- 82. The Petition alleges there are no monitoring sites that could detect liner leakage at the HRF: no bedrock groundwater monitoring sites, no surficial aquifer monitoring sites, and no surface water quality monitoring sites.
- 83. The Petition also alleges there are no monitoring sites of any kind groundwater or surface water to detect leakage of the Equalization Basins.
- 84. The MPCA disagrees with the allegation that the HRF and the equalization basins are not appropriately monitored. The MPCA evaluated the groundwater monitoring at the Plant Site and has determined that additional wells to monitor effects from the HRF are not required at this time. The final permit includes language requiring the permittee to (a) include in the HRF design a lysimeter under the HRF sump (or another monitoring device capable of monitoring potential impacts) and (b) assess the suitability of the proposed monitoring prior to construction of the HRF. Any leachate bypassing the HRF double liner system would be captured by the FTB Seepage Capture System and treated prior to discharge. Groundwater monitoring was also evaluated at the Mine Site and the MPCA determined that, because a monitoring well is located immediately adjacent to the basin system, additional wells to monitor effects from the Equalization Basins are not necessary. The permit requires an annual evaluation of the suitability of the existing groundwater monitoring network, based on actual data, to adequately monitor groundwater flows from the mine site. Response to Comments Multiple-543-BL and Multiple-543-BF provide further discussion on this issue.
- 85. This comment raises a factual issue, but the comment does not identify new facts for the MPCA to consider. Because there are no new facts to consider, and there is no reasonable basis for the dispute, the MPCA finds that a hearing would not aid the commissioner in making a final decision on the matter. Therefore, the criteria in Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.

The tailings basin and Category 1 stockpile wells only monitor water levels. (WaterLegacy)

- 86. The Petition alleges the paired monitoring wells and piezometers proposed to be located inward and outward of the tailings basin seepage capture system and the Category 1 stockpile seepage containment system are inadequate, and suggests that additional monitoring for metals must be added.
- 87. The MPCA disagrees that monitoring of metals is needed in these monitoring wells. The primary purpose of the monitoring of the paired piezometers and monitoring wells is to monitor water levels to verify that an inward gradient is being maintained, as discussed in Paragraph 72. Also, MPCA disagrees that parameters indicative of copper-nickel mining are not included for the paired monitoring wells. Monitoring for these wells includes sulfate, specific conductance and total dissolved solids, which will be directly indicative of whether project-related seepage is bypassing

Findings of Fact Conclusions of Law And Order

- the containment systems. The MPCA's reasoning behind monitoring requirements is further explained in response to Comments Multiple-543-BG and Water-711.
- 88. The MPCA finds that the comment raises a factual issue, but it does not identify new facts for the MPCA to consider. The MPCA fully evaluated the monitoring needed at the facility, including monitoring around the tailings basin and Category 1 stockpile, in the development of the permit. Because there are no new facts to consider, and there is no reasonable basis underlying the dispute, a contested case hearing would not aid the commissioner in making a final decision on the matter. Therefore, the criteria in Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.

The monitoring to evaluate northward flow only monitors water levels. (WaterLegacy)

- 89. The Petition alleges the monitoring to evaluate northward flow at the mine site is deficient because it will only detect water levels and no other parameters.
- 90. The MPCA disagrees with the allegation. The purpose of the north flow path wells is to monitor the hydrologic conditions so that the MPCA and MDNR can confidently predict whether a north flow path may develop in the future. This can be accomplished by monitoring current and future groundwater elevations along the potential north flow paths. Monitoring of groundwater quality is not needed to accomplish this purpose. The MPCA's reasoning behind the monitoring requirements is further explained in response to Comments Multiple-543-BN and Water-711.
- 91. The MPCA finds that this comment raises a factual issue, but the comment does not identify new facts for the MPCA to consider. The MPCA evaluated the monitoring needed at the facility, including the extent of monitoring needed to ascertain whether a northward flow may occur in the future, in the development of the permit.
- 92. Because no new facts are identified, and there is no reasonable basis underlying the dispute, the MPCA finds that a hearing would not aid the commissioner in making a final decision on the matter. Therefore, the criteria in Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.

All monitoring results should be posted online. (WaterLegacy)

- 93. The Petition states that all monitoring results from the PolyMet project should be immediately posted online so that members of the public will have timely and transparent information as to the compliance of Minnesota's first copper-nickel sulfide mine.
- 94. All monitoring data is reported to the MPCA on monthly Discharge Monitoring Reports (DMRs) which are posted online on the MPCA website (available at https://www.pca.state.mn.us/quick-links/eda-surface-water-data), and is also available by request to the agency. The MPCA finds that this comment does not raise a factual issue. Because there is no factual dispute, the MPCA finds that a contested case hearing is not appropriate according to Minn. R. 7000.1900, subp. 1(A).

Findings of Fact Conclusions of Law And Order

The draft permit is based on inaccurately projected quality and quantity of wastewater such that the current design of the WWTS will not work. (MCEA et al.)

- 95. The Petition alleges the draft permit fails to accurately project the quality and quantity of water that will be generated by the mining operation, such that the WWTS as designed will not adequately treat the wastewater prior to discharge. The Petition alleges the WWTS is undersized, the projections underestimate flows, and pollutant concentrations will exceed projections.
- 96. The issues regarding water contributions and concentrations of wastewater to be treated by the WWTS were addressed in the EIS. In addition, the design of the WWTS underwent thorough engineering review by the MPCA during both the EIS and permitting processes. Furthermore, the WWTS can be expanded if necessary. These issues are further explained in response to Comments Water-714 through Water-715-B.
- 97. The comment raises factual issues, but neither the petitions nor the cited experts identify new information, so a contested case hearing is unnecessary. In addition, the MPCA has adequately addressed the factual issue and there is no reasonable basis underlying the dispute. For these reasons, The MPCA finds that a contested case hearing would not aid the Commissioner in making a final decision on the matter and the criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

The MPCA cannot rely on future actions and faulty assumptions to issue the permit. (MCEA et. al., Save Our Sky Blue Waters)

The assumption of 100% performance over a long term is not appropriate. (MCEA et al.)

- 98. The Petition alleges the MPCA must assume the WWTS will not work perfectly and the MPCA must consider and create permit conditions based on the position that groundwater and surface water will be contaminated when the engineering controls fail.
- 99. The MPCA disagrees with this allegation. Like other NPDES/SDS permits, this permit requires the construction and operation of the treatment facility and sets operating limits that ensure proper operation of the treatment system. The MPCA will not issue a permit that it believes the permittee will not comply with. The MPCA has adequately addressed the issue raised by this comment in the response to Comment Water-716.
- 100. The MPCA finds that the comment raises a legal issue, not a factual issue, regarding the enforceability of permit requirements. MPCA finds the Petition's allegation does not satisfy criterion established in Minn. R. 7000.1900, subp. 1(A).
- 101. The MPCA finds that no new information on this issue is identified in the petition and a contested case hearing would not aid the Commissioner in making a final decision on the matter, so the criterion in Minn. R. 7000.1900, subp. 1(C) is not met.

Findings of Fact Conclusions of Law And Order

The draft permit cannot rely on future adaptive management for compliance. No adaptive management plan exists and the public has no opportunity to review and assess adaptive management actions after permit issuance. (MCEA et al.)

- 102. The Petition alleges that the MPCA inappropriately relies on future adaptive management or mitigation strategies to protect groundwater and surface water as an answer to scientific uncertainty. The petition further alleges that the MPCA cannot rely on an outdated 2016 adaptive management plan and that by relying on the Applicant to develop adaptive management plans in the future, the public is deprived of a meaningful opportunity to review those plans to assess whether they are sufficient and enforceable.
- 103. The MPCA agrees that the permit allows for adaptive management. However, the permit does not rely solely on adaptive management to assure compliance. The permit contains the standards that must be met. Requiring adaptive management provides a way to ensure ongoing compliance with those standards. The MPCA has subjected the overall design of the proposed facility, including the specific engineering controls proposed, to a thorough review.
- 104. Adaptive management is commonly used in NPDES permitting to address issues as they arise and is regularly used in complex environmental scenarios to ensure standards are met. Support for allowing for adaptive management is further described in response to Comments Water-704, Water-716, and Water-716-B.
- 105. To address a specific Petitioner concern, the MPCA has added language to the draft permit to specify the required design components of the WWTS. With this change, the permit more clearly defines the treatment actions that must be taken. Adaptive management is simply a requirement for the applicant to respond expeditiously and effectively to treatment control problems if they arise.
- 106. The Petition criticizes the 2016 adaptive management plan as outdated because it referred to a wastewater treatment facility and a wastewater treatment plant, but the proposed treatment components of the reconfigured WWTS are the same as originally proposed. Only the location of the proposed mine site treatment system has changed. The change in location of treatment does not affect the requirements for adaptive management, as noted in response to Comment Water-716-D.
- 107. The MPCA has clarified language in the permit to state that any adaptive management plans submitted in response to permit requirements would be evaluated to determine if a major permit modification is necessary. If the MPCA determines that a major modification of the permit is required, then the permit would be subject to the administrative procedures governing permit modifications, including those related to public review and comment.
- 108. The MPCA finds that the Petition raises legal issues regarding the authority to include adaptive management and the adequacy of public participation. These issues do not meet the criterion for a contested case hearing in Minn. R. 7000.1900, subp. 1(A).

Findings of Fact Conclusions of Law And Order

- 109. The MPCA finds that the Petition raises a factual issue regarding the adequacy of the existing adaptive management plan, but the petition raised no new facts and there is no reasonable basis for a dispute.
- 110. The Petition also raises a factual issue to the extent it questions the adequacy of the adaptive management procedures required. The MPCA finds that the comment did not introduce any new facts to suggest that those procedures or the general types of adaptive management proposed are inadequate. The MPCA carefully considered the need for adaptive management and the conditions for the permit, and revised the permit to clarify the permit requirements. Because there was no factual basis provided for the comment, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion in Minn. R. 7000.1900, subp. 1(C) is not satisfied.

Ability to make adaptive management decisions without an adequate monitoring network. (MCEA et al.)

- 111. The Petition alleges that the strategies for adaptive management cannot be implemented due to inadequate monitoring.
- 112. As described above and in response to Comments Water-710 through Water-712-B, the MPCA finds that the proposed monitoring network identified in the permit is adequate. The permit requires water quality or water level monitoring at 169 monitoring stations at the Mine Site and Plant Site. The permit also requires an Annual Comprehensive Performance Evaluation Report, which includes an annual evaluation of monitoring and performance data as well as engineering controls at the Mine Site and Plant Site. Rationale for the monitoring network is further described in response to Comment Water-716-E.
- 113. The MPCA finds that the comment raises a factual issue; however, no new information is presented so there is no reasonable basis underlying the dispute. The MPCA has adequately addressed the facts raised by this comment, and the comment is premised on an inaccurate assumption. Therefore, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion contained in Minn. R. 7000.1900, subp. 1(C) is not satisfied.

The Permit fails to adhere to applicable legal standards under the Clean Water Act and Minnesota Law in that the draft permit lacks Water Quality Based Effluent Limits (WQBELs) for pollutants with reasonable potential to cause an exceedance of water quality standards. (MCEA et al., WaterLegacy)

The future passive treatment system will likely discharge more pollution than the WWTS. (MCEA et al.)

- 114. The Petition alleges the Applicant has not identified the exact levels of each pollutant it anticipates discharging from a future passive treatment system, except to say that these treatment systems will be designed with the goal of meeting applicable water quality standards.
- 115. The MPCA finds this allegation inapplicable to the permit decision. The Petition appears to misapply the coverage authority of the NPDES/SDS permit at issue to potential future activities that

Findings of Fact Conclusions of Law And Order

may occur beyond the term of this permit. The current NPDES/SDS permit is for the specific treatment system proposed (WWTS) as described in the application and required to be installed. The permit does not authorize the use of, or transition to, a passive treatment system. If a passive treatment system is proposed in the future, the Permittee would need to submit an application to modify or reissue the permit, including submittal of any information necessary for the MPCA to evaluate the change in treatment technology and for consideration of reasonable potential to exceed a water quality standard. Response to Comment Water-717 provides further discussion on this issue.

116. The MPCA finds that this comment raises a legal issue related to the applicability of the current draft permit to potential future activities that may be proposed at a future date. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

Technology Based Effluent Limits (TBELs) and "Operating Limits" will not ensure long-term protection of the water quality standards or prevent degradation, so WQBELs are mandated. (MCEA et al., WaterLegacy)

- 117. The Petitions allege that the Permit must contain WQBELs that would restrict the applicant from discharging pollutants at levels that would violate water quality standards and that the TBELs in the draft permit are not sufficient to protect water quality.
- 118. The MPCA disagrees with the allegation. The MPCA conducted a reasonable potential analysis and assigned appropriate permit limits as explained in the Fact Sheet and further described in response to Comments Water-717 through Water-720-E. The MPCA determined that WQBELs are not required in the permit because there is no reasonable potential to exceed a water quality standard.
- 119. The Petitioners appear to misunderstand the purpose of TBELs in the permit. TBELs are used in industrial facility NPDES permits to ensure all dischargers in an industry sector are meeting the same minimum standards, based on treatment technology, across the country. They are not intended to serve as de facto WQBELs when there is no reasonable potential to exceed standards. For this permit, MPCA has determined that compliance with the Operating Limits at monitoring location WS074 will ensure the treatment system operates properly and water quality standards in the receiving waters will be met.
- 120. The MPCA finds that this comment raises a legal issue regarding applicability of water quality-based effluent limits. The comment questions MPCA's interpretation of the Clean Water Act. Therefore, a contested case hearing is not appropriate on this issue pursuant to Minn. R. 7000.1900, subp. 1(A).
- 121. To the extent this comment questions the MPCA's determination of reasonable potential and thus the need for water quality-based effluent limits, the MPCA finds that it raises a policy issue regarding the MPCA's chosen method to evaluate reasonable potential. Policy issues are not disputes of material fact and are not subject to a contested case hearing. The MPCA finds that the Petitions do not introduce any new facts and MPCA's detailed responses in Response to Comments

Findings of Fact Conclusions of Law And Order

Water-717 through Water-720-E demonstrate that there is no reasonable basis for the dispute that would meet the criteria for a contested case hearing in Minn. R. 7000.1900, subp. 1(A) and (C).

- 122. MCEA also alleges that the sulfate Operating Limit is voluntary and that its voluntary nature undercuts the MPCA's determination that no WQBELs are needed to control pollutants.
- 123. The MPCA disagrees with the allegation. The MPCA acknowledges that PolyMet voluntarily proposed to include a wastewater treatment system capable of achieving 10 mg/L sulfate into the project design. However, language in the permit clearly establishes that the Operating Limits for sulfate and copper included in the permit are not voluntary and that noncompliance with these Operating Limits would be an enforceable violation of the permit.
- 124. The comment regarding the Operating Limit for sulfate raises a legal issue regarding the enforceability of the permit condition. Therefore, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A). In addition, the comment identifies no new facts that would provide a reasonable basis for the dispute and the criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

The lack of Water Quality Based Effluent Limits in the Permit shields PolyMet from citizen suit enforcement. (MCEA et al.)

- 125. The Petition alleges that by failing to include WQBELs for *all* pollutants that will be discharged from the facility, the MPCA has created a broad enforcement shield for the Applicant, insulating the Applicant from enforcement should its discharge exceed water quality standards for those pollutants that are not limited by WQBELs in the Permit.
- 126. The MPCA disagrees with this legal interpretation. The MPCA has included Operating Limits for sulfate and copper in the permit that are enforceable. Given the treatment technology required by the permit, compliance with the Operating Limits will ensure the discharge does not exceed water quality standards for other parameters. Responses to Comments Water-718 through Water-719-A further describe the MPCA's reasons for not including WQBELs in the permit.
- 127. The MPCA has further addressed this issue by adding a prohibition against discharges from the treatment facility that violate water quality standards.
- 128. The MPCA finds that this comment raises a legal issue, so a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

Operating Limits elude antibacksliding restrictions. (MCEA et al.)

129. The Petition alleges that the MPCA must revise the permit to ensure the 10 mg/L Operating Limit for sulfate and the 9.3 ug/L Operating Limit for copper are retained in future permits. The Petition states that because the limits are neither TBELs nor WQBELs, the Clean Water Act antibacksliding provision will not apply to any future permits.

Findings of Fact Conclusions of Law And Order

- 130. The MPCA disagrees. The need for WQBELs or other limits in future permits would be determined at the time of any application for permit reissuance submitted by the Permittee. The MPCA found that there was no reasonable potential to exceed a water quality standard, so no WQBEL for this permit is required by law. Despite finding no reasonable potential, the MPCA is including Operating Limits for sulfate and copper in the permit to ensure proper operation of the facility and protection of water quality standards in the receiving waters. Responses to Comments Water-719-B and Water-719-C address the rationale for including Operating Limits in the permit.
- 131. The MPCA finds that this comment raises a legal issue, not a factual issue. The comment interprets the Clean Water Act and takes the position that the permit should be revised so that limits could not be modified in the future. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).
- 132. In addition, the MPCA finds that the comment on the content of potential future permits is outside the jurisdiction of the MPCA commissioner's authority in this action. Therefore, the comment also fails to satisfy the criterion in Minn. R. 7000.1900, subp. 1(B).

Without WQBELs there will be no future antidegradation trigger forcing the Applicant to consider the least-degrading alternative. (MCEA et al.)

- 133. The Petition alleges an antidegradation review will not be triggered during future permit reissuances unless the pollutant loads exceed that authorized level of degradation allowed by current and anticipated discharges authorized by the Permit. The Petition interprets this to mean the only effluent limit or trigger for antidegradation in the future would be the TBEL concentrations included in the draft permit, not the concentrations used for the current antidegradation review.
- 134. The MPCA disagrees with the allegation. As described in response to Comments Water-718, Water 718-B and Water-719-D, the permit imposes an enforceable Operating Limit for sulfate. Because the 10 mg/L Operating Limit for sulfate controls the degree of treatment for sulfate, and the degree of treatment for the other pollutants as well, any change to the sulfate Operating Limit would affect the loading of sulfate and other pollutants authorized by the permit. In that circumstance, an antidegradation analysis and review would be necessary.
- 135. To the extent the comment interprets the applicability of antidegradation review, the MPCA finds that it raises legal issues. Because the comment raises legal and not factual issues, a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

MPCA's antidegradation analysis fails to consider future phases of the project. (MCEA et al.)

136. The Petition alleges the MPCA failed to consider future phases of the project, including various closure scenarios, in its antidegradation analysis.

Findings of Fact Conclusions of Law And Order

- 137. The MPCA conducted an antidegradation review to address the discharges that would be authorized by the proposed NPDES/SDS permit. Longer-term impacts of the project were evaluated in the EIS and are further described in response to Comments Water-720 through Water-720-E and Water-716. The antidegradation review considered the discharge authorized by the permit, and cannot reasonably evaluate discharges that are beyond the scope of the application and permit.
- 138. The comment does not identify any new facts. To the extent the comment interprets the applicability of antidegradation, it raises legal issues. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

MPCA's antidegradation analysis did not consider alternatives to reduce discharges in the long-term. (MCEA et al., WaterLegacy)

- 139. The Petitions allege the MCPA failed to assess feasible and prudent alternatives that prevent and minimize near-term and long-term degradation of high water quality waters (e.g. dry stack tailings and filtered tailings).
- 140. The MPCA disagrees with the allegations. Alternative project designs were addressed by the MDNR during the EIS process. The Final EIS found that the alternatives did not meet the purpose and need of the project, and/or did not have less impact. The findings and conclusions of the Final EIS for these alternatives were considered and incorporated in MPCA's review of the antidegradation analysis. Responses to Comments Water-720-E and Multiple-543-EM address the issue regarding alternatives.
- 141. This comment primarily raises a legal issue regarding adequacy of meeting antidegradation procedures. To the extent that this comment questions whether other alternatives are feasible and prudent, it raises factual issues.
- 142. Because the comment primarily raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate. Minn. R. 7000.1900, subp. 1(A). To the extent it does raise a factual issue, the MPCA adequately addressed the issue and no new facts were identified. The MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion in Minn. R. 7000.1900, subp. 1(C) has not been satisfied.

The MPCA's reasonable potential analysis is flawed. (WaterLegacy)

- 143. The Petition alleges there is no demonstrated treatment efficacy by the WWTS for coppernickel mining influent and that the data cited by the MPCA is deficient and incomplete to evaluate the reasonable potential for exceedances.
- 144. The MPCA disagrees with the allegations. As described in response to Comments Multiple-543-AJ and Multiple-543-BQ through Multiple-543-BV, the MPCA reviewed design modeling and pilot testing data and determined it was sufficiently similar to the expected WWTS influent for the

Findings of Fact Conclusions of Law And Order

proposed project as described by GoldSim modeling conducted during the EIS process. The design modeling provided in the permit application accounted for variability in the volume and quality of the wastewater that are expected to occur as the Project progresses. It demonstrated that the proposed design of the WWTS can be optimized so the discharge will meet the Operating Limits included in the permit.

- 145. To demonstrate that membrane treatment technologies were capable of meeting treatment targets, the applicant also conducted a 6-month pilot testing program using seepage water from the existing tailings basin. For a portion of the test, additional metals were added to the test influent to more closely simulate projected influent quality from nonferrous contributions. Results of the pilot testing were used in the MPCA's reasonable potential analysis from which the MPCA determined the proposed design is capable of meeting the Operating Limits included in the permit. On this basis, the MPCA concluded that there is not reasonable potential for the discharge to cause or contribute to an excursion above water quality standards.
- 146. The MPCA finds that the comment raises an issue of fact, but the facts do not provide a reasonable basis for dispute. Because the comment did not identify new facts, or provide a reasonable basis for the dispute, the MPCA finds that a contested case hearing would not aid the Commissioner in making a final decision on the matter and the criteria in Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.

The MPCA accepted outmoded technology and unreasonably rejected best available alternatives for the PolyMet project. (WaterLegacy)

- 147. The Petition alleges that with respect to preventing the release of untreated wastewater and contamination to groundwater and surface water, many aspects of the PolyMet project reflect outmoded technology and unreasonable rejection of best available alternatives for siting, design, and management of the project.
- 148. The MPCA disagrees with the allegations. The MPCA has considered the overall design of the PolyMet project, including technologies proposed for storage of materials, and the containment, collection and treatment of process wastewaters. Design components and siting issues were thoroughly addressed in the EIS process and were further considered in the permitting process. Further details are provided in response to Comment Multiple-543-EN through Multiple-543-ES.
- 149. The same issues were raised in the EIS where the MDNR, in consultation with MPCA, considered them.
- 150. The MPCA finds that the comment does not identify any new facts for the MPCA to consider, and provides no reasonable basis for a dispute, and therefore a contested case hearing would not aid the commissioner in making a final decision on the matter. The criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

Failure to set effluent limits for the existing tailings basin discharges. (WaterLegacy)

Findings of Fact Conclusions of Law And Order

- 151. The Petition alleges the MPCA must conduct a reasonable potential analysis for the existing discharge from the existing basin, and the draft NPDES/SDS permit must include WQBELs for any parameters that have the potential to cause or contribute to exceedances of Minnesota's numeric and narrative water quality criteria.
- 152. This comment does not raise an issue of fact related to the proposed permit. The comment addresses conditions in an existing NPDES/SDS permit and consent decree. As explained in the Fact Sheet, the consent decree will continue to require pumpback until the containment system is constructed and that decree will remain the regulatory control document until that time. See Fact Sheet at 74-75. Response to Comment Multiple-543-Cl also provides further discussion on this issue.
- 153. Because the existing permit is not the subject of this action, the MPCA finds that it is beyond the jurisdiction of the MPCA commissioner to grant a contested case hearing on that subject during this permit process pursuant to Minn. R. 7000.1900, subp. 1(B). The MPCA finds that even if it were within the commissioner's jurisdiction, the comment does not raise specific new facts or identify a factual dispute, so the criterion of Minn. R. 7000.1900, subp. 1(A) is not satisfied.

The permit ignores the requirement to impose WQBELs and ignores the narrative standard on conductivity toxicity, which is exacerbated by the MPCA's "Legacy Memo" for a closure scenario in which the State of Minnesota becomes responsible for closure of the Cliffs Erie tailings basin. (WaterLegacy)

- 154. The Petition alleges the draft permit fails to set water quality based effluent limitations for direct discharge from the existing tailings basin prior to the construction of the FTB and its seepage containment system, and therefore the permit fails to comply with the Clean Water Act, its implementing rules, or Minnesota water quality standards.
- 155. This comment does not raise an issue of fact related to the proposed permit. The comment addresses an existing permit that is not the subject of the current action. The Petition also references a memo that was written by the MPCA to aid in estimating future financial assurance needs for the Permit to Mine under a hypothetical future scenario. Response to Comment Lines Multiple-543-CI and Multiple-543-CJ provide further discussion on this issue.
- 156. To the extent the comment raises requirements of the Clean Water Act and state rule, the MPCA finds that those are legal issues rather than factual issues, for which a contested case hearing is not appropriate according to Minn. R. 7000.1900, subp. 1(A). To the extent the comment raises issues with permits not subject to this action, including an existing NPDES/SDS permit and the Permit to Mine, the MPCA finds that it is beyond the jurisdiction of the MPCA commissioner to grant a contested case hearing on the matters, so pursuant to Minn. R. 7000.1900, subp. 1(B) they cannot trigger a contested case hearing.

The draft permit does not adequately address effluent toxicity. (MCEA et al., WaterLegacy)

Findings of Fact Conclusions of Law And Order

There is reasonable potential for the narrative standard for toxicity to be exceeded and the draft permit does not require an effluent limit for toxicity and specific conductance. (MCEA et al., WaterLegacy)

- 157. The Petition alleges there is reasonable potential that the direct discharge to surface water will exceed the narrative standard prohibiting aquatic toxicity and will contribute to the existing fishes bioassessment impairment. The Petition further states that Minnesota's rules define "protection of the aquatic community from the toxic effects of pollutants" to mean "the protection of no less than 95 percent of all species in any aquatic community."
- 158. The Petition also alleges the draft permit does not contain a water quality based effluent limit for specific conductance (in the context of the effect it may have on toxicity) or a limit for chronic whole effluent toxicity.
- 159. The MPCA conducted a reasonable potential analysis while reviewing the permit application and determined that due to the level of treatment provided by the WWTS, there is no reasonable potential for the project's discharge to cause or contribute to an exceedance of the narrative water quality standard for toxicity in the discharge. In fact, the degree of pollutant removal accomplished by the membrane treatment portion of the WWTS will be such that the WWTS effluent will need to be "stabilized" (i.e., certain key constituents need to be added back into the treated effluent) to minimize the risk of toxicity in the discharge.
- 160. The MPCA finds that Minnesota rules do not provide for a water quality standard for specific conductance as it relates to the effect it may have on toxicity. Responses to Comments Water-721 and Multiple-543-CC through Multiple-543-CH provide further discussion on this issue.
- 161. Although MPCA has determined there is no reasonable potential for toxicity and that no WQBEL is required, the MPCA revised the permit to include a chronic whole effluent toxicity limit of 1.0 TUc applicable at Station SD001 to address any uncertainty associated with the effluent "stabilization" process. That toxicity test would identify effluent toxicity due to specific conductance. Responses to Comments Water-721 and Multiple-543-CC through Multiple-543-CH provide further discussion on this issue.
- 162. To the extent the comment addresses compliance with MPCA's rules, the MPCA finds that this comment raises an issue of law. Such an issue is not appropriate for a contested case hearing according to Minn. R. 7000.1900, subp. 1(A).
- 163. To the extent the comment questions the reasonable potential analysis, the MPCA finds that it raises an issue of fact and policy. Because the comment does not provide new facts or provide a reasonable basis for the dispute, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion in Minn. R. 7000.1900, subp. 1(C) is not satisfied. In addition, the MPCA has considered the comment and proposes to impose an effluent WQBEL for toxicity, so the issue is moot.

Findings of Fact Conclusions of Law And Order

The MPCA did not consider conductivity information referenced in the Petition (B.L. Johnson & M.K. Johnson Report: An Evaluation of a Field-Based Aquatic Life Benchmark for Specific Conductance in Northeastern Minnesota, November 2015). (WaterLegacy)

- 164. This raises an issue of fact, but does not raise any specific new facts. The MPCA was aware of the referenced report and the referenced predictions for effluent conductivity during the permit development, and the MPCA considered the comment. The MPCA has revised the permit to include a chronic whole effluent toxicity limit.
- 165. Because the comment does not provide new facts or provide a reasonable basis for dispute, and the MPCA has adequately addressed the issue, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

The draft permit allows discharges of mercury at levels not authorized by the Clean Water Act. (MCEA et al., WaterLegacy)

The Clean Water Act prohibits discharge of additional mercury to impaired waters unless a TMDL is in place. (MCEA et al., WaterLegacy, Save Our Sky Blue Waters)

- 166. The Petition alleges the Applicant's new discharge of mercury cannot be permitted because the discharge will impact the Embarrass and Partridge Rivers, which currently exceed mercury water quality standards, and that the MPCA has not identified how the mercury limit of 1000 ug/L in the draft permit will meet the criteria of 40 C.F.R. § 122.4(i)(2).
- 167. The MPCA conducted a reasonable potential analysis for mercury while reviewing the permit application and determined there is no reasonable potential for mercury to cause or contribute to an exceedance of water quality standards. The MPCA expects the project to lead to a net reduction in mercury load exported from the watershed because of the seepage capture and wastewater treatment systems.
- 168. The permit fact sheet has been updated to provide MPCA's interpretation of the regulation as it applies to the project. In short, the discharge will not cause or contribute to a violation of water quality standards. Therefore, the prohibition in 40 C.F.R. § 122.4(i) does not apply. Responses to Comments Water-722 through Water-722-B and Multiple-543-CB provide further discussion on this issue.
- 169. The MPCA finds that the issue of compliance with 40 C.F.R. § 122.4(i)(2) is a legal issue, not a factual issue. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

The bench scale testing conducted in 2006 to assess the potential for copper nickel tailings to adsorb or remove mercury is inadequate and the proposed treatment system will not treat mercury in the discharge to the water quality standard as described in Minn. R. 7052. (WaterLegacy)

Findings of Fact Conclusions of Law And Order

- 170. The Petition alleges that the bench scale testing conducted in 2006 to assess the potential for copper nickel tailings to adsorb or remove mercury is inadequate and that available evidence does not show that the treatment system proposed by PolyMet is capable of treating tailings basin seepage so that the effluent meets the water quality standard for mercury.
- 171. The MPCA disagrees with the allegation. The comment reviews the same information the MPCA reviewed in the EIS and reaches a different conclusion. The EIS concluded that the demonstrated ability of the NorthMet tailings to adsorb mercury, in combination with the previously documented mercury removal capabilities of the underlying taconite tailings, would be expected to result in an overall increase in mercury adsorption and subsequently lower concentrations of mercury in FTB seepage. MPCA used this information in conjunction with the results of the pilot testing and the design modeling in the reasonable potential analysis, and MPCA determined there is no reasonable potential for mercury to cause or contribute to an exceedance of water quality standards. MPCA acknowledges that the referenced testing was of short duration, but no new information is identified that would lead the MPCA to conclude that the testing was invalid or to disagree with the conclusion presented in the EIS. To provide greater assurance that the mercury standard will be met, the MPCA added an operating limit for mercury to the permit. The MPCA's analysis is further described in response to Comments Multiple-543-BX, Multiple-543-BZ, and Multiple-543-CA.
- 172. The MPCA finds that this comment raises an issue of fact, but it does not identify any new information for the MPCA to consider. Because the comment does not present any new facts or other evidence to dispute the MPCA's conclusion, the MPCA finds that there is not a reasonable basis for the dispute and a contested case hearing would not aid the commissioner in making a final decision on the matter. Therefore, the comment does not satisfy the criterion of Minn. R. 7000.1900, subp. 1(C).

The organic metal scavenger described in the permit application is not part of the proposed WWTS. (WaterLegacy)

- 173. The Petition alleges that although treatment proposed in the draft permit includes membrane separation and a greensand filter, it does not include an organic metal scavenger or other treatment specific to mercury removal.
- 174. As described in response to Comment Multiple-543-BY, due to the expected low concentration of mercury in the influent to the WWTS, the use of an organic metal scavenger is not being proposed for the project. The comment appears to have misinterpreted the intent of the reference to an organic metal scavenger in the antidegradation review. The statement in the review was included not to say it was being proposed, but to provide additional support that mercury removal to below 1.3 ng/L is technically feasible because it has been demonstrated elsewhere in Minnesota.
- 175. This comment raises an issue of fact, but it does not identify any new information. Because there are no new specific facts in the comment, the MPCA finds that there is no reasonable basis underlying the claimed dispute and a contested case hearing would not aid the commissioner in

Findings of Fact Conclusions of Law And Order

making a final decision on the matter. Therefore, the comment does not satisfy the criterion of Minn. R. 7000.1900, subp. 1(C).

The draft permit violates the Clean Water Act by failing to perform appropriate analysis or establish permit conditions to prevent discharge to surface water via hydrologically connected groundwater from exceeding water quality standards. (MCEA et al.; WaterLegacy)

Discharges to surface water via hydrologically connected groundwater are not addressed in the draft permit. (MCEA et al.)

- 176. The Petition alleges the draft permit fails to include conditions or limitations that prevent pollutants from being discharged to surface water via hydrologically connected groundwater.
- 177. The MPCA disagrees with the allegation. The permit includes specific authorized discharge points. It does not authorize any other point source discharge. Responses to Comments Water-723 and Multiple-543-AB through Multiple-543-BH further address how the permit is protective of groundwater and does not allow discharges via groundwater to surface water.
- 178. This comment raises a legal issue, not a factual issue. The comment interprets federal law as applied to the facility. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate according to Minn. R. 7000.1900, subp. 1(A).

Neither the fact sheet or draft permit identify the chemical composition of any potential pollution source or chemical composition predicted for various waste streams constituting the influent for the WWTS. (WaterLegacy)

- 179. The Petition alleges that the MPCA should have used data from other PolyMet permit applications and data used during environmental review to analyze the reasonable potential of PolyMet's discharge to hydrologically connected groundwater to cause or contribute to the exceedance of a water quality standard.
- 180. The MPCA disagrees with the allegation. As described in response to Comments Multiple-543-AG through Multiple-543-AJ, the MPCA fully considered information from the EIS and from other permit applications to the extent the information from the other permit applications was relevant to the NPDES/SDS permitting process.
- 181. Data from the EIS on the nature, volume and composition of pollutant sources and waste streams was also included in the NPDES/SDS permit application that the MPCA considered.
- 182. The MPCA finds that the comment raises a factual question. However, it does not identify any new information or provide a reasonable basis for dispute, so a contested case hearing would not aid the commissioner in making a final decision on the matter. The criteria of Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.

Findings of Fact Conclusions of Law And Order

Reasonable potential analysis should be done on all discharges to groundwater. (WaterLegacy)

- 183. The Petition alleges the MPCA has not determined whether the project Mine Site and Plant Site discharges to surface water through hydrologically connected groundwater have the reasonable potential to cause or contribute to an exceedance of water quality standards, particularly as a result of uncontained tailing seepage and Category 1 waste rock stockpile seepage.
- 184. The MPCA disagrees with the allegation. As described in response to Comments Multiple-543-AK and Multiple-543-AM, the comment questions the efficacy of controls required in the NPDES permit and presumes failure of control systems without providing justification. The same issues were raised in the EIS and the MDNR, in consultation with the MPCA, considered those issues.
- 185. The MPCA finds that the comment does not raise any new facts for the MPCA to consider at the permitting stage: it merely disagrees with the MPCA's conclusion. Therefore, the MPCA finds that a hearing would not aid the commissioner in making a final decision on the matter and the criteria of Minn. R. 7000.1900, subp. 1(A) and (C) are not satisfied.
- 186. To the extent that the comment relates to the need for an evaluation of reasonable potential on seepage, it raises is a legal issue. Whether groundwater that reaches surface water is within the scope of the NPDES permit program is also a legal issue. Because these are legal issues and not factual issues, the MPCA finds pursuant to Minn. R. 7000.1900, subp. 1(A) that they do not justify a contested case hearing.

The draft permit does not contain enforceable conditions to control discharges to surface water through hydrologically connected groundwater. (WaterLegacy)

There are no limits or enforceable requirements to improve the South Seepage Management System. (WaterLegacy)

- 187. The Petition alleges the draft permit imposes no limits or enforceable requirements for PolyMet to improve the South Seepage Management System.
- 188. In response to the comment, the MPCA has revised the permit to clarify requirements for construction and operation of the South Seepage Management System. See response to Comment Multiple-543-AT for further discussion.
- 189. This comment raises a legal question regarding permit enforceability and does not present factual issues. Because there is no issue of fact and no specific new facts were raised, and because the comment has been addressed through a revision of permit language, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A)

Doc Type: Findings of Fact

Findings of Fact Conclusions of Law And Order

The failure of the company to maintain an inward gradient at the tailings seepage containment system and Category 1 seepage containment system would not constitute an enforceable violation of the NPDES/SDS permit. (WaterLegacy)

- 190. The Petition alleges that not maintaining an inward gradient at the seepage containment systems is not an enforceable condition due to the qualifier regarding temporary reversals due to high snowmelt or rainfall.
- 191. In response to the comment, the MPCA has revised the permit to clarify requirements related to operation of the containment systems. The permit contains specific requirements regarding maintenance of the inward gradient. See response to Comment Multiple-543-AU for further discussion on this issue.
- 192. This comment questions whether controls in the NPDES permit are enforceable and raises a legal question, not a factual issue. Because there is no issue of fact, no specific new facts were raised, and because the comment has been addressed through a revision of permit language, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

Nothing in the permit would revoke authorization to construct the HRF if site conditions are not favorable. (WaterLegacy)

- 193. The comment alleges that the draft permit does not include a provision that would prohibit construction of the HRF if site conditions are not favorable.
- 194. The MPCA added language to the permit to state that if the MPCA determines that site conditions at the proposed HRF location preclude the construction and operation of the HRF in compliance with applicable water quality standards, construction of the HRF at that location is prohibited. The permit does thoroughly address the issue of site suitability and foundation stability. The design components of the HRF were raised in the EIS and the MDNR, in consultation with the MPCA, considered those issues. As part of NPDES/SDS permitting, the MPCA worked with a third-party consultant to evaluate the stability of the HRF foundation and construction methods. The permit includes specific requirements for a detailed process of site investigation, design, and MPCA approvals prior to HRF construction. Absent these MPCA approvals, construction of the HRF is not authorized. See response to Comments Multiple-543-AQ, Multiple-543-AR and Multiple-543-EQ for more details.
- 195. The comment raises a factual issue, but does not raise any new facts for MPCA to consider, and provides no reasonable basis for the dispute. Furthermore, the MPCA has addressed the issue through permit revisions. Therefore, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the comment does not satisfy the criterion in Minn. R. 7000.1900, subp. 1(C).

The draft permit is unclear on the prohibition of discharge to surface water. (WaterLegacy)

Findings of Fact Conclusions of Law And Order

- 196. The Petition alleges it is unclear whether the draft permit for the Mine Site is intended to prohibit indirect as well as direct discharge to surface waters. The commenter questions whether the "prohibition of discharge" provisions in the NPDES permit are enforceable.
- 197. In response to the comment, the MPCA has revised the permit to clarify permit language regarding the prohibition of discharges at the Mine Site. This is further discussed in response to Comment Multiple-543-AX.
- 198. This comment raises a legal question and does not present factual issues. Because there is no issue of fact and no specific new facts were raised, and because the comment has been addressed through a revision of permit language, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

The Permit will endanger human health and the environment. (MCEA et al., Save Our Sky Blue Waters)

- 199. The Petition alleges the applicant's proposal to store tailings behind earthen dams will endanger human health and the environment.
- 200. This comment raises a factual issue regarding dam construction, but it is not within the commissioner's jurisdiction. Response to Comment Water-724 provides further discussion of this issue.
- 201. The adequacy of the dam safety requirements is within the jurisdiction of the MDNR. Minn. Stat. §§ 103G.501-561. Because this issue is outside the MPCA's jurisdiction, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(B).
- 202. In addition, the MPCA finds that the comment does not raise any new facts that would merit a contested case hearing; all the cited information was provided to the MDNR directly. The MPCA finds that the comment does not satisfy the criterion of Minn. R. 7000.1900, subp. 1(A).

The antidegradation and nondegradation analyses erroneously relied on a nonexistent "Continuation of Existing Conditions" scenario. (MCEA et al.)

The draft permit relied on a "no-action" scenario under which seepage from the LTVSMC tailings basin would continue as-is. (MCEA et al.)

203. The Petition alleges the MPCA relied on an existing conditions scenario, in which the Project does not occur, when the MPCA conducted its antidegradation and nondegradation analyses. The Petition also alleges that the MPCA did not include any consideration of future activities to improve water quality under the consent decree between MPCA and Cliffs Erie.

Findings of Fact Conclusions of Law And Order

- 204. Antidegradation requires the MPCA to evaluate the change to existing high water quality, which accounts for existing control documents. Minn. R. 7050.0265, subp. 5; Minn. R. 7050.0260, subp. 2. The comment alludes to a "Legacy Closure Plan" proposed by PolyMet as a basis to argue that existing conditions are not the baseline against which to measure. The Legacy Closure Plan is an appendix to the Permit to Mine, and is not a document issued by the commissioner. The existing control documents are the existing Cliffs Erie NPDES/SDS permit and the associated consent decree. The consent decree does not require specific dates to terminate the ongoing pumpback systems, to dewater the tailings basin, or to meet particular water quality objectives. Thus existing conditions are expected to continue and there is no basis to calculate the "alternative" existing water quality conditions as the comment requests. Response to Comment Water-725 and Water-725-A provides further discussion on this issue.
- 205. The comment raises a legal issue, not a factual issue. The comment interprets state rules as applied to the facility. Because the comment raises a legal and not factual dispute, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

The antidegradation and nondegradation reviews did not take into account actions anticipated by the MPCA. (MCEA et al.)

- 206. The Petition alleges it is unlawful for MPCA's antidegradation and nondegradation analysis to rely on the premise that the existing water quality conditions at the site will continue to be impacted by seepage from the existing tailings basin.
- 207. The comment references a memo that describes necessary actions in the event that PolyMet acquires title to the property, prematurely closes before operations, no other entity obtains title, and the state subsequently becomes responsible for the property.
- 208. The antidegradation review requires an evaluation of degradation from existing water quality, as described in Paragraph 204. The conditions in the referenced memo do not reflect existing water quality and the memo is not a control document for purposes of antidegradation.
- 209. As described in response to Comments Water-725 and Water-725-B, this comment raises a legal issue, not a factual issue. The comment interprets state rules as applied to the facility. Because the comment raises legal and not factual issues, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

The antidegradation analysis performed for the NorthMet project with respect to pollutants other than mercury or methylmercury is inadequate for NPDES/SDS permitting or for Section 401 certification. (WaterLegacy)

Failure to analyze degradation resulting from release of pollutants to bedrock groundwater and surficial aquifers. (WaterLegacy)

Findings of Fact Conclusions of Law And Order

- 210. The Petition alleges the MPCA's antidegradation analysis fails to analyze the degradation of surface water at the Mine Site and Plant Site that would result from releases of pollutants from the project to bedrock groundwater and surficial aquifers.
- 211. The MPCA disagrees with the allegation. The comment presumes failure of the engineering controls put in place to control release of pollutants to the groundwater. The MPCA reviewed all of the available information and concluded the permit conditions can be met and will result in meeting water quality standards. Further details on what was considered during the MPCA's antidegradation review are described in response to Comments Multiple-543-EH through Multiple-543-EJ.
- 212. The MPCA did not make any specific comments in the Fact Sheet on this issue, but considered this issue during the EIS process and during permit development.
- 213. The comment raises factual issues, but does not identify any new facts that provide a reasonable basis for dispute. Because the comment did not raise specific new facts, and there is no reasonable basis underlying a dispute, the MPCA finds that a contested case hearing would not aid the commissioner in making a final decision on the matter and the criterion of Minn. R. 7000.1900, subp. 1(C) is not satisfied.

The PolyMet permit must stand alone; separate permitting actions are required for existing permits for the existing tailings basin. (WaterLegacy).

- 214. The petition alleges the PolyMet project must stand alone and the MPCA should take separate action to update and issue permits at the existing tailings basin.
- 215. The MPCA finds that this raises a legal issue, not a factual issue. The permit was written to meet the requirements of the Clean Water Act and state law for the proposed NorthMet project, and must be judged on that basis. Because the comment raises a legal issue, the MPCA finds that a contested case hearing is not appropriate pursuant to Minn. R. 7000.1900, subp. 1(A).

Public Comments Received and MPCA Consideration of Comments

- 216. The MPCA received 686 comment submittals from government agencies, Tribal Parties, environmental groups, and other interested parties with approximately 1600 individual comments on the draft NPDES/SDS Permit. The comments were grouped into like themes.
- 217. Detailed responses to comments can be found in Attachment A.
- 218. The majority of the comments were not unique and raised the same issues identified in the contested case hearing requests. The following comments raised issues not addressed in the contested case hearing requests.

Findings of Fact Conclusions of Law And Order

Comments Not Raised in the Contested Case Hearing Requests

- 219. A commenter raised concern that there is no mercury limit in the NPDES/SDS permit or the Construction Stormwater General Permit for the Overburden Storage and Laydown Area.
- 220. With respect to construction stormwater, the Construction Stormwater General Permit requires best management practices that will have the effect of reducing mercury in stormwater. The type of construction proposed at the facility is comparable to the types of construction at other projects covered by the Construction Stormwater General Permit. The Construction Stormwater General Permit is beyond the scope of this NPDES permit. Additional information is provided in response to Comment Water-818. With respect to water quality-based effluent limits, see above at Paragraphs 117-124.
- 221. A commenter recommended that the sulfate limit at WS074 be reported based on monthly average concentration instead of the proposed annual average to lessen or eliminate the potential for periodic or seasonally elevated discharges of sulfate.
- 222. The operating limit for sulfate applies to the rolling average annual sulfate concentration at WS074, calculated as the rolling average of the most recent 12 calendar monthly average sulfate values. The MPCA finds that requiring an annual average is reasonable because recent research showed wild rice did not respond to shorter-term fluctuations in sulfate concentrations. The permit also contains a monthly sulfate target of 9 mg/L. Exceedance of the target triggers adaptive management actions to prevent an exceedance of the operating limit. Also see response to Comment Water-593.
- 223. A commenter recommended adding surface water monitoring stations on the Partridge River, Wyman Creek and Second Creek.
- 224. The MPCA evaluated the surface water monitoring needed at the facility during the development of the permit, considered the facts presented in the comment, and added a surface water monitoring station (SW414) downstream of the Mine Site at the West Pit Outlet Creek downstream of the Transportation and Utility Corridor. The MPCA finds that the proposed surface water monitoring locations, with the addition of SW414, are adequate to evaluate effects from the project. See also response to Comments Water-803 through Water-805.
- 225. A commenter recommended additional monitoring wells near the Equalization Basins, Overburden Storage and Laydown Area, ore surge piles, north of the mine pits, and around the tailings basin for parameters including monitoring for copper, zinc, lead, mercury, arsenic and pH.
- 226. The monitoring well network required by the permit is robust: it includes 78 wells or piezometers at the Mine Site and 40 monitoring wells or piezometers at the Plant Site. The MPCA finds that the wells monitoring the Mine Site near the OSLA and equalization basins will identify potential project impacts and effectively determine compliance at downgradient locations. The MPCA has considered this comment and in addition to the wells identified in the permit, the MPCA will be requiring an additional bedrock well to be located downgradient of the FTB. Also see response to Comment Water-806.

- 227. A commenter suggested adding effluent limits to SD002-SD011 to make it clear that PolyMet is required to comply with applicable WQS for all discharges to ensure the state has the ability to take enforcement actions for non-compliance.
- 228. Station SD001 is where the final effluent leaves the WWTS and is the "splitter box" where the effluent is distributed to outfalls SD002-SD011. Water quality samples collected at SD001 are entirely representative of the quality of water discharged at SD002-SD011. Limits apply at SD001 as well as the internal monitoring station, WS074, where the operating limits apply. The MPCA has added language to the permit stating the discharge of treated wastewater from the WWTS must not violate state water quality standards. See response to Comments Water-591-B and Water-801.
- 229. A commenter requested that within bedrock monitoring wells, the frequency of monitoring of Group B and C wells be increased during all blasting phases to adequately capture any seepage of contaminated waste that may infiltrate into groundwater and drinking water.
- 230. The MPCA finds that the quarterly and annual monitoring frequencies for groundwater sampling are sufficient due to the very slow velocities of groundwater at the site (on the order of a few to tens of feet per year) and will be sufficient to adequately monitor potential impacts from blasting and other site activities. The MPCA's rationale is further described in response to Comment Water-605.
- 231. A commenter expressed concern that there is no estimate of mercury in seepage from various locations.
- 232. The Permit does monitor sufficiently for mercury in seepage. It requires monitoring for mercury in seepage and at several other internal monitoring points, including the influent to the WWTS from the FTB seepage capture system (WS015), mine pit dewatering (WS401-404), combined mine water sources (WS415 & WS416), treatment of the mine water effluent (WS072 & WS073), and OSLA runoff (WS413). The Permit also limits mercury at the internal performance monitoring station (WS074). In addition, the Permittee is required to submit an Annual Comprehensive Performance Report to assess the performance of the facility engineering controls at the Mine Site and Plant Site in minimizing impacts to water resources downstream of the facility. Mercury must be evaluated in this report.
- 233. A commenter expressed concern that the annual assessment to ensure no unauthorized discharges from the mine site and plant site lacks an enforcement mechanism. The commenter asserts that the failure to describe actions MPCA will take to enforce the permit is a major deficiency of the draft permit.
- 234. As described in response to Comment Water-753, permits contain requirements applicable to the permittee. Statutes and rules define the scope of enforcement authority available to the permitting agency. Enforcement actions are determined at the time of discovery and their severity is based on the severity of the violation. If there is an unauthorized discharge, it will be a violation of the permit and the MPCA will determine appropriate enforcement action at that time.

- 235. To verify proper operation of the treatment system, the draft permit requires an annual evaluation of the engineering controls at the Mine Site and Plant Site. The permittee is required to conduct an annual comprehensive assessment of the engineering controls and monitoring system at the Mine Site and Plant Site to prevent impacts to water resources downstream of the project. If the evaluation of the facility indicates the engineering controls are not operating as intended or are not providing a sufficient level of control, the Permittee must describe in detail the adaptive management or corrective actions that are being done or will be done to correct the problem, including a schedule for their implementation. Should insufficient control cause a violation of a permit condition, the MPCA can take action to enforce the permit. The MPCA finds that no change to the permit is needed.
- 236. A commenter disagrees that the annual groundwater evaluation and comprehensive performance evaluation reports will provide "early" identification of potential impacts so adaptive management can take place. The commenter asserts this "early" identification of potential impacts requires the addition of continuous flow monitoring and increased frequency of WQ monitoring.
- 237. The MPCA finds that the quarterly and annual monitoring frequencies for groundwater sampling are sufficient due to the very slow flow velocities of groundwater at the site (on the order of a few to tens of feet per year) and will be sufficient to adequately monitor potential impacts from the project.
- 238. The MPCA further finds that as evaluated in the EIS, it would take years for groundwater to reach surface water. Thus, the quarterly monitoring of groundwater, in conjunction with the annual comprehensive evaluation of the monitoring results, would provide warning before any impact to surface water. With respect to flow monitoring, the MPCA confirmed with the MDNR that the flow is measured every 15 minutes.
- 239. A commenter requested that MPCA not allow PolyMet to add new toxic pollution to the federally designated Area of Concern (St. Louis River Estuary). The comment questions the efficacy of controls of the seepage capture systems required in the NPDES permit at the Mine Site and Plant Site.
- 240. As described in paragraph 72, the containment systems function on the principle of maintaining an inward hydraulic gradient across the barrier wall that is part of the system design. If the hydraulic gradient is inward, hydraulic head is greater outside the basin and water cannot escape instead, water will tend to flow into the capture system. The Modflow modeling conducted for the EIS indicated that the capture efficiency for both systems would be in excess of 90% and the subsequent GoldSim modeling indicated that degree of capture would be sufficient to protect downgradient surface and ground water quality.
- 241. A commenter asserted that if after operations begin, it is determined there are unauthorized discharges to surface or groundwater, MPCA must pursue appropriate enforcement action for noncompliance and add new permit limits for all discharge points not previous included in the permit.

- 242. This comment addresses actions outside the permit conditions. The permit includes specific authorized discharge points. It does not authorize any other point source discharge and in fact prohibits direct discharge to surface waters from the mine site and plant site. If the Permittee does not comply with the permit, the permittee would be subject to enforcement actions to correct the violations. For any other point to be authorized, the permittee would have to submit an application to modify the permit. For further details, see Response to Comments Water-591-A and Water-716.
- 243. A commenter asserted that there is potential for groundwater to flow toward Spring Mine Creek (east of the tailings basin). The commenter asserts that no support is provided for the assumption that no groundwater would escape the containment system on the east side of the tailings basin.
- 244. During the EIS, a hydrologic assessment was used to evaluate the effectiveness of the eastern section of the FTB Seepage Containment System. Along most of the eastern side of the Tailings Basin, elevated bedrock will prevent groundwater seepage. In the area of the East Dam, groundwater flow is currently from the east toward the Tailings Basin because of the high hydraulic head in the high ground east of the Tailings Basin. Construction of the East Dam and the tailings deposition behind the dam will result in hydraulic heads that will allow water from a limited area at the eastern edge of the FTB to flow east towards the toe of the East Dam. The MPCA finds that installation of the eastern segment of the FTB Seepage Containment System will address this scenario. The permit stipulates that cells 2E and 1E of the FTB cannot be merged until that segment of the containment system is fully constructed and operating. The hydraulic gradient across the containment system cutoff wall will be inward, toward the Tailings Basin. Also see response to Comment Water-737-A.
- 245. Commenters assert that there is uncertainty regarding the additional mine process water being treated at the WWTS due to the elimination of the WWTF at the Mine Site, which was not evaluated in the FEIS.
- 246. The proposed treatment components of the reconfigured WWTS and anticipated flow volumes from the Mine Site to the reconfigured WWTS will remain the same as originally proposed. The location of the proposed mine site treatment system is the only thing that has changed. Further details are provided in response to Comment Water-738.
- 247. A commenter questions whether the MPCA "Legacy Memo" absolves PolyMet of its obligation to mitigate water quality issues at the former LTVSMC tailings basin once operation commences. Additionally, the commenter expresses concern that successfully addressing the existing legacy pollution requires the unproven FTB containment system and WWTS to be effective.
- 248. The "Legacy Memo" has no bearing on the conditions of the permit; the permit requires effective operation of both the FTB seepage containment system and the WWTS. Further, the existing NPDES permit, which controls legacy water quality issues, will remain in place, as will the associated consent decree. As discussed in response to Comment 725-B, the memo addresses a specific scenario in which the State becomes responsible for actions to mitigate legacy pollution.

- 249. A commenter references the "Legacy Memo" and asserts that the MPCA is violating the Clean Water Act because there appears to be no plan to clean up Spring Mine Creek.
- 250. The comment does not relate to terms and conditions of the NPDES/SDS permit. The permit does not authorize a discharge to Spring Mine Creek. The MPCA finds that the issue falls outside of its jurisdiction over this permit decision. See also responses to Comments Water-587, Water-588-A, Water-588-B, Water-603, and Water-807.
- 251. A commenter claims that any seepage not captured by the seepage collection systems will violate the "zero discharge" standard.
- 252. To the extent that this comment raises an issue at all, it is a pure issue of law. Federal law imposes a "zero discharge standard" (at 40 C.F.R. part 440) applicable to direct discharges of process wastewater to surface water. Direct discharge to surface water from both seepage containment systems is prohibited by this permit. Further details are provided in response to Comment Water-756.
- 253. A commenter claims the Partridge River will exceed the wild rice sulfate standard during low-flow conditions. The commenter questions how this will be handled in the NPDES/SDS permit when monitoring at these locations indicates exceedance of the wild rice sulfate standard.
- 254. PolyMet has incorporated into the Project a design of the WWTS that will meet a 10 mg/L concentration for sulfate at the point of discharge into the Project's receiving waters. The MPCA has included an Operating Limit of 10 mg/L for sulfate in the permit and thus the discharge will not cause or contribute to an exceedance of the wild rice sulfate standard in the receiving waters. The project will discharge into Second Creek, which flows to the Partridge River. The sulfate Operating Limit is an enforceable limit and an exceedance of this limit is a violation of the permit. To further address concerns raised in the comment, the MPCA added a requirement prohibiting direct discharge from the South Seepage Management System to SD026. Direct discharges from the mine site to surface water are prohibited. Further information is provided in response to Comment Water-592-A.
- 255. A commenter asserts the draft permit did not address concerns previously raised by EPA during the environmental review and permitting process.
- 256. The MPCA finds that it adequately considered the previously submitted EPA comments in MPCA's development of the permit. The permit complies with Clean Water Act requirements identified by EPA, including permit coverage for all pollutant discharges expected from the facility. See response to Comment Water-731-B.
- 257. The revised permit has been provided to EPA for review as part of the regular federal oversight of the state permitting program. Additional information is contained in response to Comment Water-741.
- 258. Multiple commenters claim the draft permit allows impacts to groundwater within the property boundary.

Findings of Fact Conclusions of Law And Order

- 259. The permit includes provisions intended to prevent the groundwater from being polluted as described in response to Comment Water-510. The permit ensures that groundwater outside the seepage capture system will not become polluted.
- 260. A commenter expressed concern regarding the longevity of the liner system at the Hydrometallurgic Residue Facility.
- 261. The MPCA finds that the liner systems to be used at the project are designed to meet the long-term needs of the project. The MPCA has reviewed the design of the liner systems, including the liner material, and determined they are robust systems for their proposed applications. See response to Comment Water-93 for a more detailed discussion on the longevity of HDPE liner material to be used for the HRF.

Changes made to the permit as a result of comments received

- 262. The following changes were made to the permit as a result of individual comments received and comments received in the contested case hearing requests.
 - a. Wastewater Treatment System Performance: The MPCA updated permit requirements regarding the performance of the WWTS. These changes include additional operating limits, notification requirements, and prohibitions during effluent stabilization.
 - b. Whole Effluent Toxicity Testing: The MPCA increased the frequency of toxicity testing to quarterly during the life of the permit and a Chronic Whole Effluent Toxicity limit of 1.0 TUc was added at SD001.
 - c. Prohibition of Violation of Water Quality Standards: The MPCA added a requirement prohibiting the discharge of treated wastewater from violating state water quality standards. The MPCA also added language specifying that the MPCA may modify the permit, require corrective actions, or take other actions if the MPCA determines the discharge authorized by the permit is causing or contributing to a violation of water quality standards.
 - d. *Operating Limits*: In addition to enforceable operating limits for sulfate and copper, the MPCA revised the permit to include enforceable operating limits for arsenic, cobalt, lead, mercury, and nickel at their respective water quality standard.
 - e. *Monitoring Locations:* The MPCA revised locations for GW421 and SW410. The MPCA added an additional surface water monitoring station (SW414) and an additional bedrock monitoring well (GW121) downgradient of the FTB.
 - f. Monitoring Requirements: "Total" or "dissolved" sample types were specified throughout the permit. The MPCA added a technology based effluent limit for dissolved iron at SD001.

Doc Type: Findings of Fact

Findings of Fact Conclusions of Law And Order

Dissolved mercury monitoring was also added to the WWTS influent and effluent to be more consistent with the MPCA's mercury strategy.

- g. Mercury: The MPCA added a requirement for a Mercury Minimization Plan to be completed and submitted consistent with the MPCA's mercury strategy. To ensure the discharge from the WWTS does not exceed the 1.3 ng/L mercury standard, the MPCA revised the permit to include an enforceable Operating Limit for mercury (1.3 ng/L) at the internal monitoring point WS074 prior to discharge.
- h. Allowable discharge flow volume: The annual allowable discharge flow is now restricted to 4060 MGY.
- i. "No Discharge": The MPCA clarified language regarding discharge prohibitions in various places in the permit.
- j. Engineering Control Construction Requirements: The MPCA revised the permit to be more prescriptive of the design components of the engineering controls (i.e., seepage capture systems, liner systems, WWTS, etc.). Construction requirements and various other restrictions or requirements were added for the FTB Seepage Capture System, South Seepage Capture System, Category 1 Waste Rock Stockpile Seepage Capture System, Category 2/3 and Category 4 Waste Rock Stockpile Liner Systems, and the Wastewater Treatment System. The permit has also been revised to require the completion of an operating and maintenance manual for each of the key engineering controls (WWTS, liner systems, and seepage capture systems). Additions were also made to require a Professional Engineer licensed in the State of Minnesota to conduct various assessments required by the permit.
- k. Seepage Capture Systems: The MPCA revised the permit to specify the required design components of the seepage containment systems and to require that the containment systems must be constructed and operated to maintain an inward hydraulic gradient across the cutoff wall. The MPCA has removed the "temporary conditions" language from the permit and has revised the language to state that if an inward gradient is not reestablished within 14 days of detection of an outward gradient, it is a violation of the permit. The MPCA also revised the permit to require notification that operation of the pump-back system has ceased within 7 days instead of 14 days.
- I. System Redundancy: The MPCA revised the permit to include specific requirements for "system redundancy" at the FTB seepage containment system in the form of redundant or quickly accessible (within 48 hours) pumping capacity, spare piping and other spare parts necessary to prevent an overflow or unauthorized discharge.
- m. Adaptive Management/Permit Modification Clarification: The MPCA added language specifying that any proposed adaptive management is subject to MPCA review and approval as well as an MPCA determination on the need for a major permit modification.

Findings of Fact Conclusions of Law And Order

- n. Annual Reports: The MPCA added language to clarify that the annual assessments required by the permit are intended to be done in a proactive manner such that potential environmental impacts can be identified, and appropriate adaptive management, mitigation, or corrective actions can be taken before the impact occurs.
- o. Hydrometallurgical Residue Facility: The MPCA added language requiring the monthly and annual assessments to be performed by a Professional Engineer licensed in the State of Minnesota. The MPCA also added a requirement for the HRF Liner Plan to include an assessment of the suitability of the proposed monitoring and to specify that should the Site Investigation work cause the MPCA to conclude that the site is not suitable, construction of the HRF at that location is not authorized.
- p. *Equalization Basins*: The final permit specifies the parameters to monitor if pond underdrains are installed.
- q. Sewage Stabilization Ponds: The final permit includes a requirement that all treated sewage from the ponds must be routed to the FTB.

FINAL DETERMINATION ON ISSUANCE OF PERMIT NO. MN0071013

The MPCA's decision on the application to issue NPDES/SDS Permit No. MN0071013 is governed by MPCA's permit rule, Minn. R. 7001.0140, subp. 1, which states:

Except as provided in subpart 2, the agency shall issue, reissue, revoke and reissue, or modify a permit if the agency determines that the proposed permittee or permittees will, with respect to the facility or activity to be permitted, comply or will undertake a schedule of compliance to achieve compliance with all applicable state and federal pollution control statutes and rules administered by the agency, and conditions of the permit and that all applicable requirements of Minnesota Statutes, chapter 116D, and the rules adopted under Minnesota Statutes, chapter 116D, have been fulfilled.

264. Minn. R. 7001.0140, subp 2, states in relevant part:

The following findings by the agency constitute justification for the agency to refuse to issue a new or modified permit, to refuse permit reissuance, or to revoke a permit without reissuance:

- A. that with respect to the facility or activity to be permitted, the proposed permittee or permittees will not comply with all applicable state and federal pollution control statutes and rules administered by the agency, or conditions of the permit;
- B. that there exists at the facility to be permitted unresolved noncompliance with applicable state and federal pollution control statutes and rules administered by the agency, or conditions of the permit and that the permittee will not undertake a schedule of compliance to resolve the noncompliance;

Findings of Fact Conclusions of Law And Order

- C. that the permittee has failed to disclose fully all facts relevant to the facility or activity to be permitted, or that the permittee has submitted false or misleading information to the agency or to the commissioner;
- D. that the permitted facility or activity endangers human health or the environment and that the danger cannot be removed by a modification of the conditions of the permit;
- E. that all applicable requirements of Minnesota Statutes, chapter 116D and the rules adopted under Minnesota Statutes, chapter 116D have not been fulfilled;
- F. that with respect to the facility or activity to be permitted, the proposed permittee has not complied with any requirement under parts 7002.0210 to 7002.0310 or chapter 7046 to pay fees;
- G. that with respect to the facility or activity to be permitted, the proposed permittee has failed to pay a penalty owed under Minnesota Statutes, section 116.072.
- 265. The Permittee has submitted a complete application. The application has been reviewed and preliminarily approved by the MPCA staff. The MPCA has determined that the application demonstrates that all environmental protection standards will be satisfied.
- 266. The MPCA has reasonable assurance, based on the information submitted, that proper operation of the Facility in compliance with the requirements of the permit and the performance of all required monitoring in accordance with the conditions of the permit issued by this order will result in compliance with all applicable state and federal pollution control statutes and rules, and the conditions of the permit, and will not pose a danger to human health or the environment.
- 267. The MPCA finds that the proposed issuance of NPDES/SDS Permit No. MN0071013 as publicly noticed on January 31, 2018, and since revised, meets the requirements of Minn. R. 7001.0140, subp. 1, and none of the justifications to refuse permit issuance described in Minn. R. 7001.0140, subp. 2, exist.

CONCLUSIONS OF LAW

- The MPCA has jurisdiction over the decision whether to issue the NPDES/SDS Permit for the Poly Met Mining, Inc. NorthMet Project.
- 269. The MPCA has jurisdiction over the decision whether to grant or deny the petitions for a contested case hearing on the Poly Met Mining, Inc. NorthMet Project permit application.
- 270. The MPCA finds that the allegations in the petitions do not satisfy the criteria in Minnesota Rule 7000.1900, subp. 1, because they fail to provide a reasonable basis underlying a disputed material issue of fact such that holding a contested case hearing would allow the introduction of information that would aid the MPCA Commissioner in resolving the disputed facts to make the final decision whether to issue the Permit. There is

Findings of Fact Conclusions of Law And Order

no new information that would be brought to the trier of fact, in this case the MPCA Commissioner. Therefore, holding a hearing would not aid in making a final decision whether to issue the permit.

- 271. In light of the extensive public proceedings already held concerning this permit, the MPCA will not hold an additional public informational meeting on the permit application allowed by Minnesota Rule 7000.1900, subp. 3.
- 272. Due, adequate, and timely public notice of the proposed NPDES/SDS Permit was given in accordance with Minn. R. 7001.0100.
- 273. The requirements set forth in Minn. R. 7001.0140 for issuance of the NPDES/SDS Permit are satisfied and the NPDES/SDS Permit should be issued.
- Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

The Minnesota Pollution Control Agency denies the requests for a contested case hearing for the NorthMet Project.

The Minnesota Pollution Control Agency approves and authorizes issuance of the National Pollutant Discharge Elimination/State Disposal System Permit No. MN0071013 for the Poly Met Mining, Inc. NorthMet Project.

IT IS SO ORDERED

John Linc Stine

Commissioner

Minnesota Pollution Control Agency

20/2018

Date