

2012 “Provisional Peer-Reviewed Toxicity Values for Sulfolane” (Chapter 3 of the HHRA) and toxicity criteria developed using a different approach by ARCADIS (Chapter 4 of the HHRA).³ Chapter 5 of the HHRA provided alternative groundwater cleanup levels for sulfolane, ranging from 14 µg/L to 362 µg/L based on the different toxicity values and other exposure parameters in Chapters 3 and 4.⁴

The SPAR Division wrote to Flint Hills on July 19, 2012, directing Flint Hills to finalize the HHRA only using the Provisional Peer-Reviewed Toxicity Value (PPRTV) of 0.001 mg/kg-day for chronic oral sulfolane exposure.⁵ The Division concluded that using the PPRTV and ADEC accepted exposure parameters “for the child chronically exposed to sulfolane in groundwater,” resulted in a cleanup level of 14 µg/L.⁶ Flint Hills wrote back on August 20, 2012 disagreeing with DEC and arguing for an alternative clean up level for sulfolane of 362 ppb [comparable to 362 µg/L] based on ARCADIS work presented in Chapters 4 and 5 of the HHRA.⁷

On November 27, 2013, the Spill Prevention and Response Division (SPAR) sent Flint Hills a letter stating:

In accordance with 18 AAC 75.345(b)(2), DEC finds that the groundwater alternative cleanup level for sulfolane derived in Chapter 5 [of the draft HHRA] of 14 µg/L based on the risk characterization in Chapter 3 is protective of human health, safety and welfare, and of the environment⁸

The letter approved the analysis in Chapter 3 of the HHRA (based on the PPRTV) and disapproved the analysis in Chapter 4 (ARCADIS’ alternative supported by Flint Hills) and further directed Flint Hills to finalize the HHRA in accord with DEC’s decision.⁹

Flint Hills requested an adjudicatory hearing regarding the SPAR Division’s “decision” concerning the 14 µg/L sulfolane groundwater cleanup level stated in the November 27, 2013 letter.¹⁰ In its hearing request memorandum, Flint Hills listed five alleged disputed issues of law and fact “directly relevant” to the sulfolane cleanup level for groundwater.¹¹ Flint Hills stated that it submitted a “comprehensive analysis of

³ Hearing Request Exhibit A at 10-62 (Chapter 3) and 63-122 (Chapter 4).

⁴ *Id.* at 123.

⁵ Hearing Request Exhibit B.

⁶ *Id.*

⁷ Hearing Request Exhibit C.

⁸ Hearing Request Exhibit E.

⁹ *Id.*

¹⁰ Hearing Request and Memorandum.

¹¹ Hearing Request Memorandum at 11-12.

sulfolane toxicity” completed by experts hired at ARCADIS and proposed a “conservative alternative cleanup level supported by good science,” and alleged that this was “summarily rejected” by SPAR “without analysis, reasoning or explanation.”¹² According to Flint Hills, it was informed of the SPAR Division’s intent to use a 14 µg/L cleanup level based on the PPRTV in the July 19, 2012 letter from SPAR to Flint Hills which cited to a November 2011, draft *Risk Assessment Procedures Manual* (2011 Draft Manual) to support its statement that:

“The ADEC and EPA hierarchy [for toxicity criteria in risk assessments] identifies the use of the PPRTV when no Integrated Risk Information System (IRIS) value is available, as is the case for sulfolane.”¹³

Flint Hills argued that while the 2011 Draft Manual was “available as a guidance document for ADEC,” that it only exists in a draft form and is “not in effect as a regulation.”¹⁴ Further, Flint Hills argued that the SPAR Division incorrectly applied its regulations to determine a 14 µg/L groundwater cleanup level because it did not consider information provided by Flint Hills regarding an alternative cleanup level proposed by ARCADIS and because the 14 µg/L cleanup level was not supported by the best current science.¹⁵ Flint Hills also argued that the SPAR Division provided inadequate explanation for its decision to choose 14 µg/L as a cleanup level.¹⁶

In response, the SPAR Division initially argued that the November 27, 2013 letter was not a final decision subject to an adjudicatory hearing under 18 AAC 75.385, and therefore the request for hearing was premature.¹⁷ The SPAR Division has since accepted the position that the November 27, 2013 letter establishing a groundwater cleanup level of 14 µg/L for sulfolane was a final decision made pursuant to 18 AAC 75.345(b)(2).¹⁸

The SPAR Division argued that even considering the November 27, 2013 letter as a final decision, Flint Hills had raised only legal issues, and no genuine issues of disputed fact material to the decision to require an evidentiary-type adjudicatory hearing.¹⁹

¹² *Id.* at 13.

¹³ Hearing Request Memorandum at 9, 14-15; Hearing Request Exhibit B.

¹⁴ Hearing Request Memorandum at 15.

¹⁵ *Id.* at 21-30.

¹⁶ *Id.* at 21-24.

¹⁷ SPAR Response at 10-18.

¹⁸ February 21, 2014 Acceptance of Flint Hills’ Position on Finality of the Sulfolane Cleanup Level.

¹⁹ SPAR Response at 27-29.

Further, the Division argued that it had correctly interpreted and applied its regulations in its cleanup level determination of 14 µg/L for sulfolane.²⁰ In its response brief, the SPAR Division provided a more detailed and complete explanation than it did in its July 19, 2012 or November 27, 2013 letters as to how it came to the 14 µg/L alternative cleanup level.²¹ It indicated that it relied on DEC’s 2000 Manual, not the 2011 Draft Manual which was cited to in its July 19, 2012 letter.²² It further argued that its decision to consider only the PPRTV value was proper under the pertinent DEC regulations and guidance documents.²³

In addition to the SPAR Division response, the Commissioner’s office also received ten responses from members of the public regarding this hearing request, which I have also reviewed.

DECISION

A. Finality

Flint Hills and the SPAR Division now agree that the November 27, 2013 letter from the SPAR Division to Flint Hills was a final decision on the alternative cleanup level for sulfolane pursuant to 18 AAC 75.345 and I concur. Flint Hills properly made this request for adjudicatory hearing under 18 AAC 75.385, which states that a person aggrieved by a “final department decision under the site cleanup rules” may request an adjudicatory hearing under 18 AAC 15.195—18 AAC 15.340.

B. Decision on Request for Hearing

Flint Hills requested an adjudicatory hearing pursuant to 18 AAC 75.385 and 18 AAC 15.200 in order to decide alleged issues of disputed material fact regarding the alternative cleanup level set in the SPAR Division letter dated November 27, 2013. In this order, I address only two of the arguments made by Flint Hills- (1) that the SPAR Division rejected the sulfolane toxicity values and cleanup levels proposed by Flint Hills without sufficient analysis or explanation, and (2) that the 14 µg/L cleanup level was not required by the applicable Alaska regulations.²⁴ As my decision on these two arguments (below) results in a remand, I do not address the other arguments.

²⁰ *Id.* at 19-26.

²¹ *Id.* at 19-26.

²² *Id.* at 25.

²³ *Id.* at 19-26.

²⁴ Hearing Request Memorandum at 14, 21; Reply at 9.

1. The November 27, 2013 letter and supporting record do not provide sufficient analysis or explanation for the SPAR decision on the approved sulfolane groundwater cleanup level.

I agree with Flint Hills that the SPAR Division letter dated November 27, 2013 and the record provide insufficient analysis and explanation regarding the sulfolane groundwater cleanup level determination under 18 AAC 75.345(b)(2). The November 27, 2013 decision letter and supporting documents submitted by the SPAR Division contain little discussion or technical analysis of *how* the SPAR Division came to its final determination that the EPA Peer-Reviewed Toxicity Value (PPRTV) should be the only analysis considered in determining sulfolane toxicity, and how the sulfolane cleanup level was determined to be 14 µg/L.²⁵ The only explanation given in the November 27, 2013 letter for rejection of Flint Hill’s proposed alternative cleanup level of 362 µg/L is the following:

Chapter 4 of the Revised Draft Final HHRA, as well as its supporting appendices...is not approved in the final HHRA. The approach taken in Chapter 4 of the Revised Draft Final HHRA, as well as its appendices as listed above, is not an approach authorized by DEC regulations or risk assessment guidance documents and is, therefore, not approved and should not be included in the HHRA.

Supplementing this summary explanation with statements in the SPAR Division’s July 19, 2012 letter doesn’t do much to flesh out the SPAR Division’s explanation. That letter references the 2011 Draft Manual in explaining why the SPAR Division believes the PPRTV “should be used to finalize the HHRA.”²⁶ That manual, however, is in “draft” form and has not been adopted by reference in regulation. The 2000 Manual is in effect and relevant to the SPAR Division’s decision whether to approve an alternative cleanup level under 18 AAC 75.345(b)(2).²⁷ The SPAR Division correctly acknowledges in its response brief that the DEC Risk Assessment Procedures Manual incorporated by reference into DEC regulations at 18 AAC 75.340 is the 2000 Manual.²⁸

²⁵ Hearing Request Exhibit E.

²⁶ Hearing Request Exhibit B.

²⁷ This is recognized in the approved *Work Plan to Conduct a Human Health Risk Assessment* dated December 2011 (Work Plan) on page 1, which states that the HHRA “will follow protocols presented in the [2000 Manual] that are adopted into regulation in 18 AAC 75,” although a previous version of the Draft 2011 Manual is cited as one of the “primary ADEC references for the HHRA.” SPAR Response Exhibit 6 (Work Plan); Exhibit 7 (approval letter).

²⁸ SPAR Response at 20; 18 AAC 75.340(f)(1) (describing the “department’s Risk Assessment Procedures Manual, dated June 8, 2000, adopted by reference”); 18 AAC

There is however no explanation in the record or in the SPAR Division's November 27, 2013 letter of why it believed the 2000 Manual limited the division to only being able to approve a final cleanup level of 14 µg/L. If the SPAR Division read the 2000 Manual to require it to simply accept the toxicity criteria based on EPA's PPRTV without any review, then this would be an error of law as discussed below. If the SPAR Division correctly understood it had the ability under the 2000 Manual to accept or reject use of a toxicity value from the PPRTV, or from other peer-reviewed studies and reports, as also discussed below, then the record fails to disclose its reasoning. The record and explanation of the SPAR Division's rationale regarding a final approved groundwater cleanup level is insufficient.

2. The SPAR Division misapplied applicable regulations and standards to the extent it believed itself limited to considering only the PPRTV toxicity analysis in determining a sulfolane groundwater cleanup level under 18 AAC 75.345(b)(2).

In its response brief, the SPAR Division explained how it applied the requirements in the 2000 Manual, incorporated by reference into DEC regulations, in reaching its decision to only use the PPRTV analysis as a source for toxicity value for sulfolane.²⁹ It appears from this explanation that the SPAR Division may have believed it had no ability to modify or even reject the toxicity values derived from the PPRTV or to consider other values, analyses or information from other peer-reviewed sources.³⁰ In its brief, the SPAR Division indicated that the PPRTV analysis was the only one considered, and that because the 2000 Manual "has a stated intention to adhere to EPA's guidance," the PPRTV was the "best choice for the toxicity value."³¹ But nothing in the 2000 Manual, including the intent stated in the manual to follow EPA guidance, *requires* the Division to consider only the one EPA analysis in approving a cleanup level.

The relevant regulation and 2000 Manual allow consideration of more than just the PPRTV. Under 18 AAC 75.345(b)(2), an approved cleanup level is based on "an approved site-specific risk assessment conducted under the Risk Assessment Procedures

75.345(b)(2) (referring to the Risk Assessment Procedure Manual "adopted by reference in 18 AAC 75.340").

²⁹ SPAR Response at 20-26.

³⁰ *See, e.g.*, SPAR Response at 28 (stating that "the Division would have been hard pressed to justify using a different value under the Department's regulations and manual and EPA's explicit guidance").

³¹ SPAR Response at 25.

Manual, adopted by reference in 18 AAC 75.340.” Pursuant to the 2000 Manual, in conducting an HHRA, there is a “hierarchy of sources for toxicity criteria:”

1. the Integrated Risk Information System (IRIS);
2. the Health Effects Assessment Summary Table (HEAST);
3. EPA Criteria Documents;
4. ATSDR minimal risk levels (MRLs); and
5. other professionally peer reviewed documents as needed and as approved by ADEC on a case-by-case basis.³²

Documents listed in (1) through (4) do not currently exist for sulfolane, and therefore the operative portion of this list is Part (5). It could be possible that the only “peer reviewed document” available with the technical analysis “needed” to make a decision under 18 AAC 75.345(b)(2) is the PPRTV. But to make a blanket predetermination that the Division will not consider any documents beyond the PPRTV analysis is in direct conflict with the rest of the language in Part (5), which requires that the peer-reviewed documents be “approved by ADEC on a case-by-case basis.”³³

Additionally, there is not a *mandatory* requirement in the 2000 Manual to follow EPA guidance. The language in the Manual regarding a general intent to follow EPA guidance, referenced by the SPAR Division, merely states that, “[i]n addition to following these [the 2000 Manual] guidelines, it is *recommended* that risk assessments prepared for ADEC generally follow the basic procedures outlined in EPA’s *Risk Assessment Guidance Manual for Superfund: Volume I- Human Health Evaluation Manual* (EPA 1989)” as well as other EPA risk assessment documents.³⁴ This is not a mandatory requirement to follow EPA guidance. Rather, the operative language of the 2000 Manual regarding sources for toxicity criteria is found in Part (5), which provides that DEC may approve “professionally peer reviewed documents as needed” on a “case-by-case” basis.³⁵

³² 2000 Manual at 49.

³³ *Id.*

³⁴ SPAR Response at 22, 25, citing 2000 Manual at 4 (emphasis added).

³⁵ 2000 Manual at 49. The approved Work Plan comports with this interpretation of Part (5), stating that if developed prior to conducting the HHRA, then the “toxicity value derived” in the PPRTV would be “evaluated for use in assessing potential sulfolane exposures and risks at the site.” SPAR Response Exhibit 6 at 36 (Work Plan); Exhibit 7 (approval letter). The Work Plan further states that in addition to certain ATSDR guidance, sulfolane toxicity criteria “developed by other reputable entities will also be reviewed for possible inclusion in the risk assessment, or in a sensitivity analysis.” Exhibit 6 at 37. Such analyses would of course need to meet the “professionally peer

3. Remand to the SPAR Division

Pursuant to 18 AAC 15.220(b)(2), a decision should be remanded to department staff, with instructions if appropriate, if it is determined that “the staff or the applicant has failed to comply with a statutory or regulatory requirement” Further, where an administrative record is considered inadequate, decision-makers (courts) regularly remand matters to the agency in order to develop the record.³⁶ Here, remand is appropriate for both of these reasons. The record is currently inadequate, and it further appears that SPAR may have interpreted the requirements of 18 AAC 75.345(b)(2) and the guidance in the 2000 Manual too narrowly. To the extent the SPAR Division’s reasoning is apparent, it appears the Division mistakenly believed it was limited to considering just the PPRTV for sulfolane toxicity under the relevant regulation and the 2000 Manual. To either grant or deny an adjudicatory hearing at this stage would be ill-advised and waste precious time. Without the benefit of a record and the rationale for a Division decision, fully developed pursuant to a correct interpretation of agency regulations, a decision on hearing would not further the purpose of creating a robust DEC agency decision regarding approval of a sulfolane groundwater cleanup level.

Therefore, I **VACATE** the November 27, 2013 SPAR Division decision as it relates to the division’s approval of the groundwater alternative cleanup level for sulfolane of 14 µg/L and **REMAND** this matter to the Division for further development of the record and a decision on an approved alternative cleanup level under 18 AAC 75.345(b)(2) pursuant to the instructions below. In reaching this decision, I am not taking any position regarding what the final cleanup level should be for sulfolane.

On remand, I instruct the SPAR Division as follows:

1. In approving sources for toxicity criteria under Part (5) of the toxicity hierarchy in the 2000 Manual, the Division may accept and approve all or any portion of the PPRTV, but it must explain its rationale and reasoning for approval or disapproval

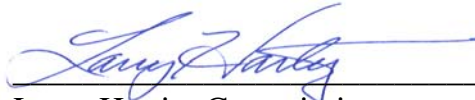
reviewed” requirement for approval for use under (5) of the 2000 Manual toxicity hierarchy.

³⁶ See, e.g., *City of Nome v. Catholic Bishop of N. Alaska*, 707 P.2d 870, 876 (Alaska 1985) (stating that “[e]ven without express statutory authority, courts may remand a case to an administrative agency for additional investigation when equity requires” (internal citations omitted); *Sierra Club v. U.S. E.P.A.*, 346 F.3d 955, 963 *opinion amended on denial of reh’g sub nom. Sierra Club v. U.S. Env’tl. Prot. Agency*, 352 F.3d 1186 (9th Cir. 2003) (noting that “the normal course of action when the record fails to support an agency’s decision is to remand to the agency for additional investigation or explanation”) (internal quotations and citations omitted).

in the record. This explanation should include a discussion addressing any relevant and substantive concerns Flint Hills raised with the SPAR Division regarding the use of the PPRTV as a source for toxicity criteria.³⁷

2. The Division is not prohibited under Part (5) of the 2000 Manual from approving the use of professionally peer-reviewed documents besides the PPRTV as a source for toxicity criteria.³⁸ If it does approve or disapprove other peer-reviewed documents, the record should include an explanation of the rationale and reasoning for the decision. If Flint Hills proposes consideration of a peer-reviewed document, the Division should consider Flint Hill's reasoning given in support of the request, and provide the SPAR Division's basis for either approving or not approving use of the document.
3. The SPAR Division should also provide its rationale and reasoning behind any disapproval of material aspects of a proposed HHRA and the SPAR Division's final decision under 18 AAC 75.345(b)(2) regarding the alternative cleanup level for sulfolane. This includes the Division's response to relevant analyses, comments and proposals from Flint Hills relating to other inputs (in addition to toxicity values) material to the risk assessment calculations.

The Commissioner's Office will communicate soon with the Division and Flint Hills regarding a status hearing regarding the pending Request for Stay.



Larry Hartig, Commissioner
Alaska Department of Environmental Conservation

DATED: April 4, 2014

Cc: Eric Fjelstad and James Leik, Perkins Coie
Lauri Adams, AAG, Alaska Department of Law
Gary Mendivil, DEC Hearing Liaison

³⁷ See, e.g., *City of Nome*, 707 P.2d at 875 (stating that “[e]ven absent a statutory duty to make findings, an agency that makes an adjudicative decision must articulate its reasons”).

³⁸ 2000 Manual at 49.