



JOHN DEERE

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Scott Hemesath
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Via Electronic Mail (messinger.lisa@epa.gov)

Ms. Lisa Messinger
Project Manager
U.S. EPA, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

RE: Comments Regarding the
Proposed Remedy and Statement of Basis for
John Deere Des Moines Works Facility
825 SW Irvinedale Drive, Ankeny, Iowa
EPA RCRA I.D. No. IAD069624500

Dear Ms. Messinger:

John Deere Des Moines Works (JDDMW) respectfully submits the following comments regarding the Proposed Remedy and Statement of Basis for the site located at 825 SW Irvinedale Drive, Ankeny, Iowa (Site) as published in the Des Moines Register on June 13, 2022 (the Statement of Basis).

Proposed Remedy

Page 2, "Groundwater," second bullet, first sub-bullet:

This sub-bullet notes that a groundwater monitoring program will be implemented to "ensure that the migration of facility related COCs at concentrations greater than media cleanup standards do not occur beyond the boundaries of AOC C and AOC E, and that the plumes remain stable."

The inclusion of AOC E in this sub-bullet is inconsistent with the media cleanup standards for groundwater in the Statement of Basis and the Remedy Evaluation Report (GHD, 2022). As stated in the "Corrective Action Objectives" section of the Statement of Basis (page 6, item vii), one Corrective Action Objective (CAO) is to "[p]revent human ingestion of groundwater containing contaminant concentrations above appropriate Maximum Contaminant Levels, or tap water RSLs at a non-cancer hazard quotient of 0.1 or cancer risk of 1×10^{-5} , whichever is lower, if no MCLs exist for a particular constituent." As presented in the Remedy Evaluation Report (GHD, 2022)¹, the remedy for AOC E, which has had source soil removal, is a site-wide institutional control for groundwater and land-use restrictions. Note that there are no COCs in groundwater that exceed a CAO at AOC E. Therefore, JDDMW requests that AOC E be removed from the groundwater monitoring program requirement on pg. 2, "Groundwater," second bullet, first sub-bullet.

Page 2, "Institutional Controls," first bullet, second sub-bullet:

This sub-bullet notes that groundwater use will be prohibited as a source of potable water and the installation of groundwater drinking water wells will be prohibited on the property..."

While JDDMW has agreed to implement site-wide groundwater use limitations, the company notes for the record that the only area of the site that does not meet the CAO for drinking water is a very limited area near AOC C.

Page 2, "Institutional Controls," first bullet, third sub-bullet:

¹ GHD, 2022. Remedy Evaluation Report. John Deere Des Moines Works Site, Ankeny, Iowa. September 15, 2021. Revised January 26, 2022.

This sub-bullet summarizes the requirement for a Soil Management Plan as part of the Site's institutional controls. Specifically, the requirement is described as: "implement a Soil Management Plan directing the appropriate management of excavated soils or materials, directing maintenance and inspection of engineered barriers and cover, and EPA notification prior to excavations in known contaminated areas."

JDDMW understands the Remedy Evaluation Report to require "Site-Wide" institutional controls for only groundwater use restrictions (see prior comment) and the land-use restrictions. Therefore, this sub-bullet should specifically reference those areas summarized in the Remedy Evaluation Report (GHD, 2022) that require a "focused environmental covenant" with a Soil Management Plan. As summarized in Section 7.11 of the Remedy Evaluation Report, there are three (3) areas of the Site with COCs in soils above CAOs that require a focused environmental covenant and a Soil Management Plan: a) the "Other DOD Area PH" (Former DOD Powerhouse); b) SWMU No. 25 South Area; and (c) "Co-Located AOCC/AOCB24/AOC B25/Other Unit 2/Other Unit 3" (AOC C area). These three (3) Site areas are the only locations that would require notification to EPA prior to excavation activities.

Page 2, "Institutional Controls," second bullet:

As part of the Site's Institutional Controls, the Proposed Remedy notes that "[t]o ensure the protectiveness of the remedy – maintain, inspect and repair engineering controls, while soil and groundwater contamination remains above media cleanup standards."

For the sake of clarity, JDDMW requests that this requirement references the three (3) areas described above (Former DOD Powerhouse, SWMU No. 25 South Area and AOC C) as the locations where the obligations to "maintain, inspect and repair engineering controls" applies.

Summary of Facility Risks

Page 5, paragraph 1, sentence 3:

This sentence, and the following sentence, references that a human health risk assessment was completed at the Former DOD Powerhouse with an existing concrete surface barrier "to ensure that no additional soil removal was necessary to mitigate for this potential exposure pathway, and that existing soil contamination may remain in place."

Although JDDMW agreed to maintain a gravel or concrete cap in the Former DOD Powerhouse area, the Revised Human Health Risk Evaluation conservatively evaluated the human health risk with no surface cover present.

Corrective Action Objectives

Page 6, item ix:

This CAO is to "[p]revent further migration of COCs in soil to groundwater and surface waters, and prevent further migration of COCs in groundwater beyond the boundary of AOC C and AOC E."

Similar to the above, the inclusion of AOC E in this CAO is inconsistent with the media cleanup standards for groundwater in the Statement of Basis and in the Remedy Evaluation Report (GHD, 2022). As identified in the "Corrective Action Objectives" section (page 6, item vii), one CAO is to "[p]revent human ingestion of groundwater containing contaminant concentrations above appropriate Maximum Contaminant Levels, or tap water RSLs with a non-cancer hazard quotient of 0.1 or cancer risk of 1×10^{-5} , whichever is lower, if no MCLs exist for a particular constituent." As presented in the Remedy Evaluation Report (GHD, 2022), the remedy for AOC E, which has had source soil removal, is a site-wide institutional control for groundwater and soil. AOC E does not exhibit COCs in groundwater that exceed a CAO. Therefore, JDDMW requests AOC E be removed from item ix. of the Corrective Action Objectives, pg. 6.

Page 8, Table 3 and Note:*

The first asterisk under the note for Table 3 states that “MCLs are not available for these particular constituents, thus groundwater media cleanup standards are based on the current tap water RSLs, based on an excess cancer risk of 1E-06 and a non-cancer hazard quotient of 0.1, whichever is lower.”

Constituent values listed in Table 3 reflect the 1E-06, however, as documented in the Remedy Evaluation Report (GHD, 2022) and as previously documented in the “Corrective Action Objectives” section of the Statement of Basis, the CAO for groundwater at the Site is based on an excess cancer risk of 1E-05 which is consistent with EPA’s Corrective Action Plan (OSWER Directive 9902.3-2A). Also as presented in the “Evaluation of the Proposed Remedy” section of the Statement of Basis (page 9, paragraph 5) EPA concludes that “[d]ue to the industrial nature of this facility, and the understanding that contaminants are not migrating off-facility, a target cancer risk of 1E-05 (1 in 100,000) and non-carcinogenic hazard quotient of 0.1 were selected by the EPA to compare against any estimated site-related cancer risks from exposures to soil and groundwater.” This conclusion, which is consistent with the other sections of the Statement of Basis and the EPA-approved Remedy Evaluation Report, is also consistent with OSWER Directive 9355.0-30.² Therefore, JDDMW requests that the following constituent values in Table 3 (highlighted) be updated to reflect an excess cancer risk of 1E-05, as listed below, and the first asterisk in the Note under Table 3 be changed to “MCLs are not available for these particular constituents, thus groundwater media cleanup standards are based on the current tap water RSLs, based on an excess cancer risk of 1E-05 and a non-cancer hazard quotient of 0.1.”

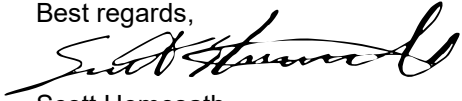
Table 3.
Groundwater Cleanup Levels

Analyte	Groundwater Cleanup Levels (ug/L)
Acetone	1,800*
Arsenic	10
Benz(a)anthracene	0.3*
Benzo(a)pyrene	0.2
Benzo(b)fluoranthene	2.5*
Bis(2-ethylhexyl)phthalate (DEHP)	6
Chromium, Total**	100
Dibenzo(a,h)anthracene	0.25*
Indeno(1,2,3-cd)pyrene	2.5*
Lead, Total	15
Naphthalene	0.61*
Methylphenol (cresol)	150*
Propylene glycol	40,000*
1,1,2-Trichloroethane	5
2-Hexanone	3.8*

On behalf of JDDMW, thank you for the opportunity to provide these comments to the Statement of Basis. If you have any questions or would like to discuss any of the above, please let me know.

² USEPA, 1991. United States Environmental Protection Agency (USEPA). 1991. Role of the baseline risk assessment in Superfund remedy selection decisions. Memorandum from Don R. Clay to Regional Directors. OSWER Directive 9355.0-30. April 22, 1991.

Best regards,

A handwritten signature in black ink, appearing to read "Scott Hemesath", written in a cursive style.

Scott Hemesath
Environmental Engineering Manager
John Deere Des Moines Works

cc: Amie Davidson, IDNR
Melanie Gotto, Deere & Company
Brian Broderick, GHD