

Responsiveness Summary

Draft Consent Decree

Heglar Kronquist Site

CSID 1135

FSID 645

Public Comment Period April 3 through May 2, 2013

Prepared by
Washington State Department of Ecology
Eastern Regional Office
Toxics Cleanup Program
Spokane, WA

May 2013

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**HEGLAR KRONQUIST SITE
DRAFT CONSENT DECREE
RESPONSIVENESS SUMMARY**

The Washington Department of Ecology (Ecology) conducted a public comment period from April 3 through May 2, 2013 for the draft Consent Decree prepared for the Heglal Kronquist Site. The Consent Decree is a formal legal agreement filed in court that requires the implementation of the Final Cleanup Action Plan. The purpose of this Responsiveness Summary is to document Ecology's responses to the written comments received during the public comment period. Ecology would like to thank all who provided comments.

Based on the comments received, no changes will be made to the proposed Consent Decree.

The Responsiveness Summary is organized as follows:

- I. Overview
- II. Index of comments received during the public comment period
- III. Comments received and responses

I. OVERVIEW

The cleanup of the Heglar Kronquist Site (Site) is being conducted under the Model Toxics Control Act (MTCA) which is the regulation that governs the cleanup of sites in the state of Washington. MTCA was passed by Washington voters in November 1988. Kaiser Aluminum & Chemical Corporation, LLC (Kaiser), named the PLP (Potentially Liable Person) under MTCA, has accepted responsibility for the Heglar Kronquist Site. Kaiser is now known as DCO Management, LLC.

In March 2009, Kaiser signed an Agreed Order which required the completion of a Remedial Investigation (RI) and Feasibility Study (FS) for the Site. Public comment for the Agreed Order was conducted from February 9 through March 11, 2009, and a public meeting was conducted on February 17, 2009. Ecology issued a Responsiveness Summary on March 26, 2009 addressing the comments received during the public meeting and during the comment period.

The RI was conducted from 2009 through 2011. This RI consisted of field activities and data assessment in order to define the extent of landfill-related contamination, which includes aluminum dross disposed of to the landfill and surface water and shallow groundwater contamination associated with the dross (principally chloride and nitrate). It also included health and ecological assessments to determine current and potential exposure pathways at the Site. The Draft Final RI Report was made available for public review and comment from June 13 through August 5, 2011, and a public meeting was held on July 28, 2011. Ecology issued a Responsiveness Summary in August 2011 responding to written comments received during the comment period.

The FS was completed in November 2011. The public comment period for the draft final FS Report was conducted from January 18 through March 19, 2012. This draft FS report evaluated possible cleanup remedies and determined two alternatives could be applied to cleanup at the Site. Alternative 1 involved removal of the dross as a permanent remedy, and Alternative 2 would implement a containment remedy. A Responsiveness Summary, addressing the comments received during this public review and comment period, was issued in April 2012. The FS report was finalized in May 2012.

Based on the information in the RI and the FS, Ecology issued the Draft Cleanup Action Plan (DCAP) in August 2012. The public comment period for this DCAP was conducted from September 19 through October 18, 2012. The DCAP provided detailed discussion of the alternatives considered and Ecology's selection process that identified the chosen remedy for the Site. A public meeting was held on September 26, 2012 at the Mount Spokane High School. The selection process was also explained during this meeting. During the public meeting, questions and comments were varied. A Responsiveness Summary was prepared to respond to written comments that were received during the public comment period.

The Final Cleanup Action Plan (FCAP) was issued in October 2012. The selected remedy in the FCAP that was determined to be “permanent to the extent practicable” was the alternative that involved **enhancement of the current landfill cap with additional ‘protection after cleanup’** requirements to ensure continued protection of human health and the environment. These additional requirements are: compliance monitoring, institutional controls that include an environmental covenant, and periodic reviews.

The Consent Decree public comment period was from April 3 through May 2, 2013. The proposed consent decree is a formal legal agreement filed in court. The work requirements in the decree and the terms under which it must be done are negotiated and agreed to by DCO Management, LLC (formerly Kaiser Aluminum & Chemical Corporation, LLC), Ecology, and the Attorney General’s Office. This Consent Decree includes work requirements necessary to implement the cleanup remedy specified in the Final Cleanup Action Plan. Written comments received during the public comment period for the Consent Decree are presented and addressed in this Responsiveness Summary. Because the cleanup remedy for the Site has already been selected in the Final Cleanup Action Plan, which incorporated public comment, this comment period for the Consent Decree was focused on the terms of the Consent Decree alone, and not the cleanup remedy.

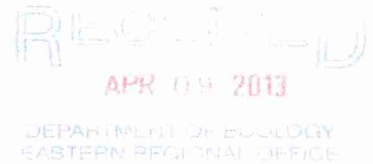
I. INDEX OF COMMENTS RECEIVED

1. Letter from Dr. Dexter R. Amend dated April 5, 2013 and received on April 9, 2013.
2. E-mail from John Roskelley received on April 19, 2013.
3. E-mail from Marla McDonald received on April 25, 2013.

II. COMMENTS RECEIVED AND RESPONSES

1. Comments submitted by Dr. Dexter R. Amend in a letter dated April 5, 2013 and received on April 9, 2013.

Site manager Teresita Bala
4601 N. Monroe st.
spokane WA 99205-1295
April 5,2013



Dear interested person

The Heglar Kronquist site has been put in the class of property contamination associated with prolonged land fills of garbage and refuse which contain innumerable contaminates for good health of the populace. It was designed to protect human health and the environment from innumerable contaminates

The MTCA known as the toxic control act is not appropriate for the Heglar Kronquist site.

The Heglar-Kronquist site has never had any toxic substances damaging to human health as garbage sits, which contain all sorts of contaminants do

The only exceedence to the regulation is sodium. The nitrogen mentioned as one from the site is found naturally in the lands about the site admittedly caused by farm fertilization activities. It is not the second contaminant. So only one exceedence is not enough to call the heglar site a toxic source for human health.

The site should not be considered under the regulations of MTCA which provides the need for only two toxic substances to be considered under their regulations over garbage dumps.

The salt from the site is a natural substance and not a toxic chemical or substance. actually salt is a required substance for human existance and good health.

The MTCA criteria are not met at the Kronquist site. Therefore the site should be left alone including the trees and let nature take it's course over time. More coverings will still not control the amount of sodium in the dross, which in time will be distributed into the ground along with it's other non toxic substances.

The Heglar Kronquist site should not be regulated under the criteria which are for garbage dumps. because the only significant substance, once in exceedence, is sodium which is a vital substance required for good health. Present residences near the land fill are not significantly impacted by substances that are toxic that they know nothing about. Well water may actually be more of a contaminant than the land fill if people could check all substances in natural water sources.

To do a million dollars worth of work may change nothing that can be found so the effort should not be done with false premises. The complex ground water flow caused by the land slide block in the area will not be controllable by man's efforts

For MTCA to disregard the impact their regulations have on land values is a gross disregard by government of the realities of life;

Sincerely
Dexter R. Amend M.D.
E. 12524 Kronquist Rd.
Mead WA 99021

A handwritten signature in dark ink that reads "Dexter R. Amend M.D." with a stylized flourish at the end.

Response: The Model Toxics Control Act (MTCA) is applicable to this Site. The leaching of the dross constituents to groundwater causes the concentrations of nitrate and chloride in groundwater and surface water to exceed state standards. MTCA requires the cleanup of such sites in order to protect human health and the environment. This cleanup process started with the Remedial Investigation and the Feasibility Study. In 2012, Ecology's selected cleanup action was presented in the Final Cleanup Action Plan (FCAP). We are now at the implementation of the cleanup action phase, the last step in the MTCA process. The enhanced cap will be designed to prevent infiltration of precipitation through the dross and stop the leaching of dross constituents to groundwater. As a result of this enhanced cap, groundwater and surface water is expected to meet the cleanup levels. The Consent Decree is the legal document that requires implementation of the FCAP.

Also, as we have already stated in the past, impacts to property values from pollution are beyond the scope of MTCA. However, the cleanup of a contaminated site should have an overall beneficial effect on the surrounding community, including improved property values. In the Spokane area, upscale residential developments have been growing adjacent or near closed landfills that were capped and maintained (e.g., Greenacres Landfill and Mica Landfill).

2. Comments from John Roskelley submitted via e-mail on April 19, 2013 (Note: October 18, 2013 E-mail Provided for Reference)

Bala, Teresita F. (ECY)

From: John Roskelley [john@johnroskelley.com]
Sent: Friday, April 19, 2013 8:27 AM
To: Bala, Teresita F. (ECY)
Cc: Roskelley, John
Subject: RE: Heglar Kronquist Site

Dear Ms. Bala:

Thank you for sending out the April 2003 draft Consent Decree review for the Heglar Kronquist Site. After further review, I have the following comments:

1. Ecology is basing its decision on estimated and inaccurate figures assigned to the cost of the various alternatives, not on the best available science and most assured method of success.
2. It is unacceptable to continue to allow drainage from the site to further contaminate the groundwater and Deadman Creek. All drainage from the site should be collected below and put through a treatment facility on-site until water quality standards are met. Ecology plans to monitor these surface and groundwater releases, which does not prevent further contamination below the site.
3. The numbers you have assigned the alternatives do not compute. Removing the dross-contaminated soil may be more expensive in the beginning, but you have not proven that this cost would be cheaper over time. Ecology should be required to detail the expenditures and estimates over the life of the project. No details were available at the meeting and staff did not know how the costs were arrived at. Trucking to a train car loading facility in Mead and shipping the dross to Roosevelt could be a cost effective solution, but there are no numbers associated with transport and disposal that were presented at the last meeting.
4. Those making the decision to cap the site should have to buy property nearby, live there and drink the water from a well in the vicinity. If this goes "south" and wells become contaminated and property values plummet in the future, the state via Ecology is going to lose \$20 million faster than you can say, "Heglar Kronquist".

I would rethink your decision and rework your numbers before plunging forward with a solution that will not solve the problem, just "reduce" it.

Sincerely,

John Roskelley

From: John Roskelley [mailto:john@johnroskelley.com]
Sent: Thursday, October 18, 2012 2:18 PM
To: Bergin, Carol (ECY); Bala, Teresita F. (ECY)
Subject: Heglar Kronquist Site

Dear Ms. Teresita Bala:

I attended the meeting at Mt. Spokane High School and would like to comment on the DCAP.

I recommend Alternative 1 as the best action to take for a clean-up. It's permanent and removes any further potential for groundwater contamination. Anything less continues to allow the chemicals from the dross to enter into the groundwater.

Ecology, of course, is looking at the cost versus the exposure. Yes, Alternative 1 is far more expensive, but it will eliminate the problem. Whereas, Alternative 2 is cheaper in the beginning, but the site will have to be monitored forever and is meant to "reduce" possible exposure, not eliminate it.

I could not calculate and, evidently, neither could Ecology, how you arrived at \$20 million for Alternative 1. The variables were significant and the cost analysis was decided upon by using trucks. With a railroad within six miles of the site, huge amounts of the dross and soil could be moved significantly cheaper to a site further away. I don't think a realistic look at costs was done for a variety of transportation methods. The capping soil for Alternative 2 also involves a tremendous amount of trucking and air pollution, so given the alternatives, why not eliminate the problem, rather than monitor it forever?

When I asked about a third alternative – drilling wells and placing pumps that would send the groundwater to a lined pond with a wastewater treatment pond to remove the chemicals, it hadn't been studied. You need to remove the chemicals from the groundwater system and letting them dilute into the aquifer or Deadman Creek is unacceptable.

I'm also worried about property values. You made your decision to select Alternative 2 in a vacuum. All the pieces weren't considered. At the meeting, we were told that's not your responsibility. Well, whose responsibility is it to ensure the homeowner's property values are protected? If you're the agency in charge, homeowners shouldn't be required to find another agency to protect their home values.

Thank you for your time. Again, I strongly recommend Alternative 1 to eliminate the problem, not "reduce" it.

John Roskelley
10121 E Heron View Lane
Mead, WA 99021

Responses:

Ecology appreciates your continued interest in this cleanup. Because the cleanup remedy for the Site was already selected in the Final Cleanup Action Plan, as a strict matter the comment period on the Consent Decree was focused on the terms of the Decree alone, and not the cleanup remedy. Regardless, Ecology will address your comments on the remedy below.

1. Ecology acknowledges your perspective. However, based on scientific evidence and the requirements of the Model Toxics Control Act (MTCA) regulation, Ecology strongly disagrees with the first comment in your letter. The breakdown of the costs that were used in the MTCA evaluations is clearly presented in the Feasibility Study (FS) Report. The draft FS was made available for public comments and was finalized in May 2012. This Final FS Report is available at Ecology's Eastern Regional Office, at the North Spokane Public Library, Hawthorne Branch, and at our website at <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1135>.

FS cost estimates generally provide an accuracy of +50 percent to -30 percent and is primarily used for relative comparative purposes between alternatives. Please note that cost is not the only factor that is considered in the selection of a remedy for a Site undergoing cleanup under MTCA. Cost is only one of the many criteria to be considered. These evaluation criteria are discussed in the October 2012 Final Cleanup Action Plan (FCAP) and were also presented during the September 26, 2012 public meeting. Major factors that led to the selection of the enhanced landfill capping instead of the removal of the dross included short-term risks and ability to implement the work.

2. We responded to your similar comment in our October 12, 2013 Responsiveness Summary for the Draft Cleanup Action Plan (DCAP), and discussed this during the September 26, 2012 public meeting. Extracting groundwater from the drainage areas for treatment would not be practicable due to the complex groundwater flow characteristics caused by the landslide block in the area. This technology was considered and discussed in the May 2012 FS Report but was not carried forward in the evaluation because it is not implementable under current site conditions. As with all landfills, the presumptive remedy is to primarily control the source by placing a cap to prevent the infiltration that is causing the leaching of contaminants. By controlling the source, it is anticipated that the groundwater and surface water would meet state criteria in a reasonable restoration time frame of two to five years. Source control would be the preferred alternative over just treatment of the groundwater. Monitoring will be conducted to ensure the remedy is successful.

3. The costs for the two alternatives are detailed in the Final FS Report. In our October 2012 Responsiveness Summary, we addressed your suggestion to consider the use of both trucks and rail cars for transporting the dross to an approved landfill. We continue to state: "Additional unloading, loading, and handling of the dross from the trucks to the rail cars would have the potential to cause additional environmental impacts in this new

area. Transport by trucks from the railroad to the receiving landfill may also be required, further creating potential for impacts and increased costs. Thus, trucking represented the most practical way to transport the dross to an off-site landfill as evaluated in the removal scenario.”

4. Ecology selected enhanced capping, along with protection requirements, as presented in the October 2012 FCAP. Protecting nearby property values is not within the scope of MTCA. The purpose of MTCA is to conduct cleanup based on science that meets the regulatory criteria and protects human health and the environment. Please note that when the source of contaminants to groundwater is controlled, and cleanup levels are attained in the groundwater and surface water, there will be no contaminated property outside of the landfill. We would also like to reiterate that there are no current drinking water wells near the landfill that are being impacted by the dross contaminants. The nitrate and chloride concentrations that exceed state standards are in shallow groundwater and in surface water along the drainage ditch. Capping the landfill will remove the source of this chloride and nitrate going to groundwater. This cap will be maintained to ensure the integrity of the cleanup action. Please note that capping has been a successful remedy implemented in landfills around the Spokane area and residential developments have been growing in areas adjacent or near landfills that were capped and maintained, such as around Mica Landfill and Greenacres Landfill.

Critical, scientific thought and application of MTCA regulatory authority has been applied in reaching this decision. Ecology stands by its decision. The site remedy was selected in the October 2012 FCAP. This public comment is for the proposed Consent Decree that will implement this selected action.

Responses for the October 12, 2012 e-mail are provided in the October 2012 Responsiveness Summary for the DCAP.

3. Comments from Marla MacDonald submitted via e-mail on April 25, 2013

Bala, Teresita F. (ECY)

From: Marla McDonald [marlamc57@hotmail.com]
Sent: Thursday, April 25, 2013 9:29 AM
To: Bala, Teresita F. (ECY)
Subject: HEGLAR KRONQUIST SITE

I don't have definite ideas about the Heglar Kronquist Site other than I live fairly close to it and drive by it just about daily.

I would like to be kept informed about other comments and progress on this Heglar Kronquist site.

Thank You! Marla McDonald, 13118 E. Farwell Road, Spokane, WA 99217

Response: Thank you for your comment. You are on our mailing list so Ecology will continue to send you updates regarding this Site. Site documents are available at Ecology's Eastern Regional Office and the North Spokane Public Library. You can also check our website for information regarding this site at <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1135>