

# STATE OF ALASKA

**DEPT. OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION AND RESPONSE  
CONTAMINATED SITES PROGRAM**

**TONY KNOWLES, GOVERNOR**

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March 29, 2002

Ted Wellman, President  
Kenai River Special Management Area Advisory Board  
Post Office Box 1247  
Soldotna, AK 99669

Dear Mr. Wellman:

Thank you for your February 27, 2002 letter representing the Kenai River Special Management Area (KRSMA) Advisory Board's concerns with the cleanup of the River Terrace RV Park (RTRVP) at Soldotna. Commissioner Brown requested that I respond to your concerns as they are directed towards environmental cleanup issues that we manage in the Contaminated Sites Program. We share your concerns regarding the contamination at this site and wish to reiterate that the considerable amount of time and cost associated with the assessment and cleanup phases of this project are an indication that it remains a high priority for the Department. As my staff informed you, we are continuing to evaluate the effectiveness of the cleanup technology used at the RTRVP site to ensure there are no negative impacts to the Kenai River.

In order to fully understand the nature and extent of the investigation and cleanup actions at this site, I wanted to summarize the activities to date. There has been extensive site assessment and cleanup work performed between 1996 and 2000. The Department coordinated with the Environmental Protection Agency (EPA) in addressing contamination at the RTRVP site. In 1997 and 1998, the property owner under the oversight of EPA conducted an emergency removal of 2,700 cubic yards of contaminated soil and constructed a soil treatment cell on site in which to treat the soil. The soil has undergone several years of treatment and data shows the treated soil currently meets the established cleanup levels. It can either be spread back on site for use by the property owner or disposed of at a location approved by EPA and the Department. The excavation efforts resulted in the removal and treatment of the main source of contamination. There are still areas with elevated levels remaining that because of their location (i.e., too deep to excavate or beneath a building) were difficult or impracticable to remove. The final determination on what to do with the remaining contaminated soil and the contaminated groundwater was dependent on the results of the other treatment and monitoring that would be conducted.

In addition to removal of the soil and main source of contamination, the Department continued to investigate the nature and extent of contamination - both on and off RTRVP property. Based on the information collected, a Proposed Plan was prepared that outlined various alternatives to address the remaining contamination at the site. The public responses to the plan ranged from a "no action" alternative to one that wanted all of the impacted soil to be excavated to non-detectable levels. The Department evaluated the comments and issued a Record of Decision (ROD) in fall 2000. The

ROD established the cleanup levels at the site and selected a biological treatment method to treat the contaminants remaining above those levels. The biological treatment consisted of an injection process to introduce Hydrogen Releasing Compound (HRC) into the groundwater. It served to provide a nutrient source (lactic acid) to the existing microbes in the soil to breakdown the dry cleaning solvent tetrachloroethylene (PCE). It also provided a hydrogen source to replace the chlorine atoms in the degradation process of PCE. The HRC treatment process was intended to enhance and accelerate the degradation of PCE prior to it migrating off RTRVP property through the groundwater and posing a risk to the environment.

The cleanup plan was implemented in a phased approach in order to determine the effectiveness of treatment prior to proceeding with the next phase. The Department recognized that the HRC process was an innovative technology but the research data indicated that it should be effective at the RTRVP site. The initial Phase I HRC injections occurred in October 2000 and the results showed an initial success beyond our expectations, and the threat from PCE to the Kenai River has been substantially reduced. PCE levels in both the upper and lower groundwater plumes were significantly reduced. The successful breakdown of PCE has resulted in a predictable increase in the degradation compound cis 1,2-dichloroethylene (cis DCE). Studies at other sites have shown that as PCE degrades, daughter products such as cis DCE are formed so the increase in cis DCE was not unexpected. While the breakdown process of PCE was expected, it occurred much faster than we anticipated. PCE degradation products are being evaluated and future cleanup action(s) will be considered based on the findings of our consultant's report that evaluates the performance of HRC over the past year. The draft of that report is due in April, 2002. As you requested, the Department will provide you a copy of that draft report when it is completed.

We share the board's concern regarding impacts to the sediments (and the benthic organisms that may be present there). The Department is evaluating the baseline sediment investigations performed in 1997 and 1999. The data results from those sample events did not warrant immediate action and further sediment studies were delayed until the treatment process could be evaluated for effectiveness and possible impacts to the sediment.

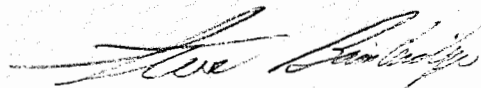
There is a plan to implement a sediment investigation in 2002 and compare the data to the 1997 and 1999 sediment information. The sediment work will be performed as a monitoring project to assist in evaluating the performance of the HRC treatment system and source removal action. It is expected that PCE levels will be reduced and cis DCE levels may be increased in the sediment because of the HRC treatment system. The Department does not expect that overall concentrations of the chlorinated compounds will be higher than found in 1997 or 1999 because the primary soil contamination was removed in fall 1997 and through the implementation of the HRC treatment system. In 2000, the Department determined that removal of the sediment contamination would cause more harm than good and it is expected that this same determination will be found after the 2002 sediment sampling has been performed. In regards to a benthic organism study, in the spring of 2000 the Department evaluated the need to perform an invertebrate study. Given that the contamination in the sediment exceeded ecological benchmarks for the contaminants found by three times, the Department determined that a benthic organism study was not warranted. Based upon past findings and expected 2002 sediment findings, the Department does not anticipate performing a benthic organism study in the near future.

March 29, 2002

In conclusion, I wish to thank you for the interest and concerns related to the possible impacts to the Kenai River from the RTRVP site. There has been a substantial amount of time and effort invested to ensure contamination from this property does not negatively impact the environment. We have implemented a new technology that appears to be effective in reducing the primary contaminant of concern and still face the challenge to address the degradation by-products. There are contingency plans to address any elevated levels of substances that may pose a risk and these will be evaluated upon review of our contractor's draft report due in April 2002.

Please note that Rich Sundet of my staff is always available to brief you on the progress of the cleanup and I encourage you to contact him whenever you have a question or concern. I understand that he will be providing the board an update on the monitoring results following our evaluation of our contractor's April report and any future plans that the department may have to ensure protection of the Kenai River.

Sincerely,



Steve Bainbridge, P.E.  
Program Manager

Cc: Commissioner Pat Pourchot, DNR  
Director Jim Stratton, DPOR  
Rep. Ken Lancaster  
Rich Sundet, ADEC



## ADVISORY BOARD

February 27, 2002

Commissioner Michelle Brown  
Department of Environmental Conservation  
410 Willoughby St., Suite 105  
Juneau, AK 99801-1795

RECEIVED

MAR 01 2002

Re: River Terrace RV Park Contamination

DEPT. OF ENVIRONMENTAL CONSERVATION

Dear Commissioner Brown:

The Kenai River Special Management Area (KRSMA) Advisory Board was legislatively created to advise the Department of Natural Resources on issues related to the management of the KRSMA. Because the Kenai River's health is affected by many factors, and because DNR is limited to managing only some of the aspects of the Kenai River's complex system, the KRSMA Advisory Board often offers advice to other state or federal entities on issues under their management purview. We would like to bring your attention to a concern of a serious nature, and request that you take action.

The KRSMA Board has been closely following the progress of cleaning up the contamination at the Riverview Terrace RV Park in Soldotna ever since we became aware of the seriousness of the PCE contamination from the former dry cleaning business. We have received regular updates and progress reports from ADEC staff members over the years, and a report by Rich Sundet during our Feb. 21 meeting caused great concern for our Board.

Three primary concerns were identified:

1. The fact that the HRC treatment of the PCE has stalled at the cis DCE stage for the past year, with no indication on whether a continued breakdown is likely anytime soon.
2. Concerns that your Department has not conducted any sediment testing since tests were done in 1997 and 1999. These studies were conducted prior to the commencement of the HRC remediation program which started in the fall of 2000, so it would be unknown what levels of PCE, cis DCE or other degraded products might be currently found in the sediments near the Kenai River, and how the data might compare to the '97 and '99 data.



Kenai Area Office, Box 1247, Soldotna, AK 99669, Soldotna 262-5581  
Kenai Peninsula Borough, Box 850, Soldotna, AK 99669, Soldotna 262-4441

Alaska Division of Parks and Outdoor Recreation, Department of Natural Resources, in cooperation with the Kenai Peninsula Borough.



3. High levels of PCE in the upper plume area seem to indicate that product is still emanating from beneath the former dry cleaning building.

We ask that you respond to the following requests:

1. We request a copy of the contractor's report that is to be provided to ADEC in March or April, as we are interested in knowing more about why the cis DCE is not degrading as expected with the HRC treatment.
2. We are very interested in what plans ADEC may have to further prompt the degradation of the cis DCE to other products in a timely manner.
3. We request information on why ADEC chose not to conduct sediment sampling in the past two field seasons, and what plans there may be to implement sediment sampling as soon as practical this spring.
4. Along with sediment testing, we request that ADEC collect samples of benthic invertebrates for analysis to determine the population and species make up found adjacent to the River Terrace site, as compared to areas unaffected by the PCE contamination. (In the early 1990's ADF&G collected baseline water quality data, including benthic invertebrate population and species composition. One of the test sites was just below the River Terrace parcel, so this may be useful for comparison with current conditions.)
5. It has become increasingly clear to members on our Board that until the main source of contamination is removed, we can anticipate a long, long clean up schedule of unknown success. In the meantime, both human health and the Kenai River's aquatic resources are at risk of exposure to the contaminants from the River Terrace RV Park. We recommend that ADEC remove the old dry cleaning building so that contaminated soils from beneath this structure can be fully excavated and treated. While we understand that this recommendation is costly, we also recognize that the alternatives may have greater consequences to the Kenai River and local residents.

The comments and concerns above have not been evaluated by the Department of Natural Resources, and may not reflect the opinions of DNR or Commissioner Pouchot. Our comments are a reflection of opinions from a wide variety of Board members representing a cross section of the public and local community.

We look forward to a continuing dialogue with staff from your Department. We have appreciated the forthright and thorough reports that have been provided us by Rich Sundet, and ask that you permit us to continue to seek solutions to this contamination problem by working with your staff.

Sincerely,



Ted Wellman  
President, KRSMA Advisory Board

Cc: Commissioner Pat Pourchot, DNR  
Director Jim Stratton, DPOR  
Rep. Ken Lancaster  
Rich Sundet, ADEC