

**North Pole Refinery Technical Project Team Update**  
**August 24, 2011**  
**8:30 am**  
**Via Teleconference**

**Technical Project Team Members in Attendance**

Bill Butler	City of North Pole, Director of City Services
Ann Farris	DEC, Contaminated Sites Program, Project Manager
Loren Garner	FHRA, Groundwater Program Manager
Nim Ha	DHSS, Acting Program Manager, EPHP
Brian Jackson	DEC, Prevention and Emergency Response Program (PERP)
Elizabeth Page	Reiss Remediation , in support of FHRA
Brandon Perkins	EPA Region 10
Shannon Price	Flint Hills Resources Alaska, Consultant

**Support Personnel in Attendance**

Rebecca Andresen	Arcadis
Brian Angerman	Barr Engineering
Steve Bainbridge	DEC, Environmental Program Manager
Bill Janes	DEC, Environmental Program Manager
Stephanie Buss	SPB Consulting, Toxicologist
Todd Dejournett	Barr Engineering
Denise Elston	DEC, Contaminated Sites Program, Program Specialist
JoAnn Grady	Grady and Associates, Team Facilitator
Dr. Laurie Haws	Tox Strategies
Meg Michell	Environmental Standards, Inc.
Lisa Minnear	OASIS Environmental, Project Manager
Phil Roberts	Standing in for Dennis Elliot, Williams
Gary Rumple	Barr Engineering
Max Schwenne	OASIS Environmental, Project Manager
Eric Zentner	Boreal Communications

**INTRODUCTIONS AND ACTION ITEM REVIEW**

The meeting began at 8:30 Alaska time as team members introduced themselves and reviewed the action items from the previous meeting. Ms. Farris informed the team that she had an outstanding action item to provide Ms. Page with the sampling documentation at other sites related to ADEC's efforts to sample the areas where petroleum products originating from the North Pole Refinery had been spilled by a third party. The team determined that all other action items from the previous meeting had been completed. The team reviewed and approved the agenda for the upcoming meeting.

**ACTION ITEM:** Ms. Farris will provide Ms. Page with the sampling documentation at other sites related to ADEC's efforts to sample the areas where petroleum products originating from the North Pole Refinery had been spilled by a third party.

#### **UPDATE ON THE REVIEW OF THE PROPOSED PROJECT SCHEDULE**

Ms. Farris notified the team that the Alaska Department of Environmental Conservation (ADEC) has nearly completed its review of the addendum to the Site Characterization Work Plan (SCWP) and the proposed schedule for incorporating the Risk Assessment (RA) and ground water model into the final cleanup plan. The team discussed the letter sent by ADEC on August 18<sup>th</sup> to Flint Hills Resources Alaska (FHRA) outlining the requirements for the project schedule. Mr. Bainbridge clarified for Ms. Page that she is correct in her understanding that the letter simply specifies what the project schedule should be and that FHRA should not plan on submitting a revised schedule based on the letter.

#### **THE SITE CHARACTERIZATION REPORT**

ADEC finished its review of the work plan and will submit a letter with its written comments to FHRA by the following day (August 25<sup>th</sup>). The team considered whether it would be possible to resolve the comments without delaying project work scheduled to begin the following Monday. The team decided to schedule a meeting during which it would discuss ADEC's written comments and attempt to solve them verbally so as to prevent a lengthy exchange of written comments that could delay the start of the field season. The team agreed to schedule the meeting on Friday, August 26<sup>th</sup> at 10 AM Alaska Time.

#### **THE FEBRUARY 11<sup>th</sup> WORK PLAN AND ITS IMPLEMENTATION**

Mr. Garner updated the team on the status of the implementation of the February 11<sup>th</sup> Work Plan. R-42 was activated and has been functioning well for several weeks. FHRA recently finished a cleaning process involving three wells, one of which was restored to full volume after previously running at only half volume. The tie-in for the new pumps at the Gallery Pond has been installed, the secondary prefilters have been activated, and all internal tasks associated with the refinery's groundwater treatment system are now complete.

Mr. Garner briefly described FHRA's ongoing efforts to further delineate the plume and gather additional information on the geological characteristics of the project area. He said that they recently installed deep wells on and off-site which have verified the location of permafrost at a depth of 130 feet just north of Unit Two and in other areas beneath the plant facility. FHRA recently initiated a new search for records of residential wells in a 30-subdivision area located a few miles north of the plume in an attempt to better understand the location of permafrost and the movement of groundwater.

#### **DATA VALIDATION PROCESS AND TIMELINE**

The team discussed various issues associated with the project's data validation process and timeline. Mr. Garner asked Ms. Buss if the Chemistry subgroup had any idea when it would allow a transition from level four to level two data packages. Ms. Buss replied the subgroup cannot predict a date at this point since they still have to determine whether the project laboratories are adhering to the key elements

documents and SOPs, and whether the methods specified in those documents are working. Mr. Garner asked if the subgroup would consider suspending the level 4 requirement for individual samples that are being taken from residential wells so that FHRA can focus its resources on the batch samples that are being taken as part of the quarterly sampling plan. Ms. Buss asked Mr. Garner to send a written copy of the request to Ms. Michell so that the subgroup can take it up for consideration during its next meeting.

**ACTION ITEM:** Mr. Garner will send a letter to Ms. Michell requesting that the requirement of level 4 data validation be suspended for individual samples taken from residential drinking water wells.

## **THE DEPARTMENT OF HEALTH AND SOCIAL SERVICES' SECOND HEALTH CONSULTATION**

Ms. Ha updated the team on the status of the development of the Department of Health and Social Services' next Health Consultation. She said that a draft version of the document is nearly complete and added that she hopes to send copies of the draft for review to her section chief and to the greater Technical Project Team (TPT) by the end of the month.

## **UPDATE ON THE PROVISIONAL PEER REVIEWED TOXICITY VALUE INVESTIGATION**

Ms. Buss updated the team on the status of the Environmental Protection Agency's study into the possible assignment of a Provisional Peer Reviewed Toxicity Value (PPRTV) for sulfolane. She said that representatives from the Environmental Protection Agency (EPA) recently told her that the agency has completed its internal review of the PPRTV document for sulfolane but they will not be able to finalize the document until the peer review of the Huntington study is complete. Ms. Buss said that the agency has indicated that they intend to finish the peer review of the Huntington Study by mid September and then complete the draft of the PPRTV document, with its health recommendations, by the end of September.

## **POSSIBLE NOMINATION OF SULFOLANE TO THE NATIONAL TOXICOLOGY PROGRAM**

Stephanie described her recent meeting with Dr. Masten of the National Institute of Health (NIH). She said that Dr. Masten reviewed the team's data and concluded that sulfolane is a worthy candidate for nomination to the National Toxicology Program (NTP). If sulfolane is nominated to the program, there is a chance that the NIH and NTP will design and conduct a study to determine its toxic endpoint. Ms. Buss said that she is currently working with Ms. Farris to draft a formal letter requesting that sulfolane be considered for nomination to the program. She said that the nomination committee does not hold regularly scheduled meetings, but she believes that they may hold a meeting sometime in the next few months during which they will consider the nomination.

## **STANDARD OPERATING PROCEDURES**

Ms. Buss reported that the Chemistry subgroup recently recommended that the Standard Operating Procedures (SOP) document for soil sampling be approved. She said that the plant key elements document is complete but since no vegetation sampling was requested this year, DEC is holding off requesting SOP review by the subgroup.

## **PREVENTION AND EMERGENCY RESPONSE PROGRAM UPDATE**

Mr. Jackson updated the team on recent developments within ADEC's Prevention and Emergency Response Program (PERP). He described a recent spill response simulation administered by PERP and commented that although he had not had a chance to review a formal evaluation of the simulation, he felt that it was a success. Mr. Jackson said that Ms. Jeanne Swartz, who led the simulation, will submit a report sometime in the near future which he will forward to the team members.

**ACTION ITEM:** Mr. Jackson will send team members a copy of the report on the recent spill simulation once it has been finalized.

**ACTION ITEM:** Ms. Grady will send Mr. Jackson the contact information sheet for the TPT for his distribution of the spill drill report.

Mr. Jackson gave a brief overview of the spills that have occurred at the refinery throughout the past six to eight weeks. He reported there was a 200 gallon release of sulfolane at the extraction unit. The release was captured by the unit's secondary containment system. Shannon & Wilson is currently performing closure testing in the spill area. Mr. Jackson said that with the exception of this spill, spills in the past six to eight months have been minimal.

## **DRINKING WATER UPDATE**

Mr. Price gave a brief overview on the status of the efforts of FHRA contractors Shannon & Wilson to resample wells in the project area using the new isotope dilution method. Shannon & Wilson re-sampled wells that formerly showed non-detect status and which were located in or just outside the bounded plume area. Thus far they have re-sampled 104 of the 164 wells that been designated to be resampled. Of the 104, 41 showed concentrations below the LLQ which were estimated at J values, 13 showed a sulfolane concentration between 10 and 20 Parts per Billion (PPB), 11 are being processed in the lab, and 39 have yet to be analyzed.

Mr. Price said that the efforts to resample former non-detect wells were combined with efforts to provide long-term water supplies to people living outside of the city area. To date, 142 of the 225 residential locations with sulfolane detections have been provided with a long-term alternative water source. He added that, thus far, FHRA has installed 30 garden tanks at the affected residences.

The team took up consideration of the decision process and timeline for taking residents with non-detect wells off bottled water. Mr. Garner said that FHRA intends to discuss the process extensively with ADEC once final standards are established. FHRA is attempting to establish a "buffer zone" in areas where the plume can be reasonably expected to potentially migrate. FHRA intends to perform follow up sampling and provide bottled water to residents living in this area. For example, they are re-sampling residential wells which were previously non-detect but which are located near wells where sulfolane has been detected. FHRA intends to resample non-detect residential wells in the buffer area on an annual basis and combine the results with relevant modeling data to determine whether to extend the buffer zone.

## WRAP UP

The team discussed the schedule and possible agenda items for upcoming TPT meetings. The next TPT meeting is scheduled for September 14<sup>th</sup> and will be held at ADEC's Fairbanks office. The agenda will include a presentation on the field work that has been completed or that is underway, as well as an update on the resolution of the project's schedule. Ms. Grady said that the Risk Communication subgroup will present a briefing on the second edition of their community newsletter as well as a community questionnaire/survey that they intend to add to the project's website. The team tentatively decided to schedule the following TPT meeting for October 6<sup>th</sup> and a tentative team telecon on December 1<sup>st</sup>. Ms. Farris suggested that Ms. Grady contact Dr. Barnes and determine when he will be able to attend a TPT meeting scheduled to be held in January 2012.

**ACTION ITEM:** Ms. Grady will contact Dr. Barnes and determine when he would be available to attend a TPT meeting scheduled to be held during the month of January.

The team adjourned at 10:30 AM Alaska Time