

Commitments

Day 1: August 14th, 2012

Site Specific Water Quality Objectives

1. Reagents, changes

Should Avalon propose alternate reagents from those proposed in the DAR for the Nechalacho Flootation Plant, Avalon will notify the Review Board prior to the Public Registry for Avalon's Thor Lake Rare Earth Element Project being closed.

- Nathen Richea, AANDC
- Time – 2:31 pm
- Date – 14-Aug-12

Day 2: August 15th, 2012

Site Specific Water Quality Objectives

2. Contaminant plume mapping, Pine Point Site

Avalon to provide information at the Pine Point site on modelling of the contaminant plume stemming from the discharge of effluent to the aquifer, including a plume diagram.

- Avalon commits to supply information by the end of September.

- Anne Wilson, EC
- Time – 2:56 pm
- Date – 15-Aug-12

Day 3: August 16th, 2012

SAR/Wildlife, Accidents/Malfunctions, Closure & Reclamation

3. Tailings Facility Cover, Pine Point Site

Avalon commits to a contingency of placing a tailings cover during the winter and designing it sufficiently to maintain long-term stability including summer thaw periods for the L-37 tailings facilities.

- Nathen Richea, AANDC
- Time – 3:30 pm
- Date – 16-Aug-12

4. Monitoring Tailings for Saturation and Trafficability, Pine Point Site

Avalon commits to monitoring tailings during operations within the L-37 tailings facility to confirm saturation levels and ensure trafficability for closure and placement of the cover.

- Nathen Richea, AANDC
- Time – 3:30 pm

Avalon Technical Session, August 14-17, 2012
Undertakings, Commitments, Homework

- Date – 16-Aug-12

5. Tailings Facility Cover, Nechalacho Site

Avalon commits to a contingency of placing a tailings cover during the winter and designing it sufficiently to maintain long-term stability including summer thaw periods for the Nechalacho tailings facilities.

- Nathen Richea, AANDC
- Time – 4:00 pm
- Date – 16-Aug-12

6. Monitoring Tailings for Saturation and Trafficability, Nechalacho Site

Avalon commits to monitoring tailings during operations within the Nechalacho tailings facility to confirm saturation levels and ensure trafficability for closure and placement of the cover.

- Nathen Richea, AANDC
- Time – 4:00 pm
- Date – 16-Aug-12

7. Effluent Plume Monitoring, Pine Point Site

Avalon commits, during operations, to implement monitoring to verify the modelling predictions of the effluent plume downgradient of the L-37 tailings facility, assess the modelling parameters and if there are deviations initiate mitigation, if required.

- Nathen Richea, AANDC
- Time – 4:30 pm
- Date – 16-Aug-12

Day 4, August 17th, 2012

Air Quality

8. Incinerator standards

Avalon commits to consulting with Environment Canada and GNWT/ENR to develop and implement an Incineration Management Plan that incorporates the information in the EC technical document on Batch Waste Incineration Management.

- Sarah Lacey-McMillan, EC
- Aileen Stevens, ENR
- Time – 9:40 am
- Date – 17-Aug-12

9. SO₂ Monitoring

Avalon commits to continuous monitoring of sulphur dioxide for one year within the fence line at the Thor Lake mine site and Hydrometallurgical Plant site.

Avalon Technical Session, August 14-17, 2012
Undertakings, Commitments, Homework

- Aileen Stevens, ENR
- Time – 9:55 am
- Date – 17-Aug-12

10. Air Quality Management Plan

Avalon commits to developing an Air Quality Monitoring and Management Plan in consultation with ENR and EC, including but not limited to stack testing and SO₂ and TSP monitoring.

- Aileen Stevens, ENR
- Time – 9:55 am
- Date – 17-Aug-12

Undertakings

Due August 31, 2012

Day 2, August 15th, 2012

Site Specific Water Quality Objectives

1. Water Balance

Request updated water balance for Thor Lake Site, showing flows and reflecting changes in the project as shown in figure 4.7-10 of the DAR.

- Anne Wilson, EC
- Ralph Grismala, Technical Specialist
- Time – 9:55 am
- Date – 15-Aug-12

2. Updated Commitments Table

Avalon to provide an updated commitments table as of the August 2012 Technical Session.

- Nathen Richea, AANDC
- Time – 10:00 am
- Date – 15-Aug-12

3. MSDS Sheets, Thor Lake Project

Avalon to provide MSDS sheets for reagents listed in Table 4.7.2.4 of the DAR and any other reagents proposed at Thor Lake or Pine Point.

- Anne Wilson, EC
- Time – 10:07 am
- Date – 15-Aug-12

Day 3, August 16th, 2012

Site Specific Water Quality Objectives

4. Supporting Evidence for Tracer Modeling

Avalon will provide, in bullet format, the back-up data, parameters and assumptions used for the calculations from Homework item #5 including volume number, source of flow and concentration.

- Ralph Grismala, Technical Specialist
- Time – 9:34 am
- Date – 16-Aug-12

SAR/Wildlife, Accidents/Malfunctions, Closure & Reclamation

5. Zone of Influence Map, Thor Lake Project

Avalon Technical Session, August 14-17, 2012
Undertakings, Commitments, Homework

Avalon to provide a single map showing the entire proposed Zone of Influence for the Avalon Project including Thor Lake, Pine Point and transportation corridors.

- Stephanie Poole, Akaitcho IMA Office
- Time – 10:35 am
- Date – 16-Aug-12

6. Traditional Knowledge Summary in Thor Lake Project

Avalon to identify how Traditional Knowledge was used and incorporated into the DAR and how TK was used in the design of the proposed project (within the limits of existing confidentiality agreements).

- Stephanie Poole, Akaitcho IMA Office
- Time – 10:45 am
- Date – 16-Aug-12

7. Water Balance Commitment (continued)

Avalon to provide the elevation of the operating level of the polishing pond within the Nechalacho site tailings facility at year 20 of operations.

- Nathen Richea, AANDC
- Time – 3:30 pm
- Date – 16-Aug-12

8. TMF – Polishing Pond, Nechalacho Site

Avalon to provide the associated capacity and retention time of the polishing pond within the Nechalacho site tailings facility at year 20 of operations.

- Nathen Richea, AANDC
- Time – 3:30 pm
- Date – 16-Aug-12

Homework

Due August 17th, 2012

Day 1, August 14th, 2012

Site Specific Water Quality Objectives

1. Chromium – hexavalent or trivalent?

Question - Chromium, with respect to Avalon's proposed Site Specific Water Quality Objectives (SSWQO) (as presented in Avalon's presentation during the technical session of 14-Aug-12) and for the purpose of determining which CCME guideline value(s) to use for chromium; is the form of chromium listed in the table hexavalent or trivalent?

- Anne Wilson, EC.
- Time - 11:10 am
- Date – 14-Aug-12

2. Nitrate as N, CCME.

Question - Nitrate as N, are the values of Nitrate as N in the proposed SSWQO table (as presented in Avalon's presentation during the technical session of 14-Aug-12) consistent with CCME values, it appears that the given information is an order of magnitude higher?

- Anne Wilson, EC
- Time - 11:32 am
- Date – 14-Aug-12

3. TDS values for Drizzle Lake.

Avalon to provide TDS values for Drizzle Lake.

- Anne Wilson, EC
- Time - 11:37 am
- Date – 14-Aug-12

4. Changes and updates to Water Modelling.

Question - What assumptions were made and what has changed in Avalon's downstream water modelling for Drizzle and Thor Lake?

- Nathen Richea, AANDC
- Time – 11:45 am
- Date – 14-Aug-12

5. Tracer modeling study clarification.

Avalon to present a simple calculation of the approximate values of dilution ratios used for tracer modelling studies.

- Ralph Grismala, Technical Specialist

Avalon Technical Session, August 14-17, 2012
Undertakings, Commitments, Homework

- Time – 11:50 am
- Date – 14-Aug-12

6. Technical Session Presentation.

Avalon to provide presentation to the Review Board.

- Request from Review Board staff
- Time – 1:15 pm
- Date – 14-Aug-12

7. Mercury, lowest detection limits; low or ultra-low?

Avalon will confirm the lowest detection limit used for calculating Mercury for the SSWQO and whether this is the “low” or “ultra-low” detection limit.

- Nathen Richea, AANDC
- Time – 1:36 pm
- Date – 14-Aug-12

8. 5-day decant for nutrients.

Avalon to provide the 5 day decant information in the SSWQO table as found in the technical session presentation of 14-Aug-12.

- Nathen Richea, AANDC
- Time – 2:24 pm
- Date – 14-Aug-12

Day 2, August 15th, 2012

Site Specific Water Quality Objectives

9. Update Table 1 of Avalon’s May 10, 2012 submission.

Avalon to provide an update of table 1 in attachment 3 of Avalon’s May 10th, 2012 submission to reflect the predicted max LC-50 concentration for years 1 through 20.

- Ralph Grismala, Technical Specialist
- Time – 11:22 am
- Date – 15-Aug-12

10. Update of table 6.4-2 of the DAR.

Avalon to provide an update of table 6.4-2 of the DAR, to include updated information of the zinc concentration and tracer concentration.

- Ralph Grismala, Technical Specialist
- Time – 11:31 am
- Date – 15-Aug-12

11. Tailings facility higher resolution imagery.

Avalon to provide updated higher resolution images of proposed changes to the tailings management facility.

- Ralph Grismala, Technical Specialist
- Time – 11:43 am
- Date – 15-Aug-12

Day 3, August 16th, 2012

SAR/Wildlife, Accidents/Malfunctions, Closure & Reclamation

12. Tailings Facility Graphic, Pine Point Site.

Avalon to update HTF – Phase 1 (Years 2-20) L-37 pit graphic to clarify that no spillway or surface discharge feature is proposed for the tailings pond - remove north-easterly arrow).

- Nathen Richea, AANDC
- Time – 3:30 pm
- Date – 16-Aug-12

13. 2012 Archaeology Report, Thor Lake Project

Avalon to provide the final 2012 archaeological survey report, under confidential cover, to the Review Board and interested parties.

- Stephanie Poole, Akaitcho IMA Office
- Time – 11:15 am
- Date – 17-Aug-12