

October 17, 2018
File: TAU-CTLA 18-01

Attention: Dennis Morr
TAU Centralia

Dear Dennis,

Reference: Recertification of Centralia Mine Pit 7 Limited Purpose Landfill

INTRODUCTION

TransAlta Centralia Mining LLC (TCM) has constructed and operated a Limited Purpose Landfill (LPLF) for the disposal of bottom and fly ash generated from the Centralia Generation Plant. The LPLF is located within the limits of the mined-out Pit 7 area.

Norwest Corporation provided expertise for the geotechnical aspects of the project, while CH2M Hill was responsible for completing the preliminary LPLF designs, including filling and drainage plans. (Note – Norwest was acquired by Stantec Consulting Limited in May 2018). The bottom and fly ash fill that will be placed in the landfill is a low moisture granular material, and will be truck-dumped and compacted. Norwest completed a design preliminary design report for the LPLF in 2008 (Norwest January 2008),

SUBSEQUENT WORK

Subsequent to Norwest's report, additional reports related to the LPLF design were completed by others for TCM. Information from two of these reports has been provided to Norwest from TCM:

- URS Corporation. Report on Geotechnical Evaluation of Powder River Basin Coal Ash Properties and Limited Purpose Landfill Stability TransAlta Centralia Mine, Washington. April 4, 2011.
- CH2M Hill.J. Barker, P.E., J. Dehner, P.E. Calculations confirming liner anchoring and settlement for LPLF. July 15, 2011

Norwest have read these reports but have not independently verified or checked the work completed. The results of both reports appear to confirm the design parameters adopted in the original 2008 Norwest report.

CURRENT STATUS

The following information on the landfill has been provided by Dennis Morr of TCM and relates to the status of the LPLF:

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- The Landfill base was constructed in phases beginning in 2009. The Stage 1 Area was constructed in 2009, Stage 2, Phase A-3b in 2011, Phase A-4 in 2013 and Phase A-5 in 2014.
- Since initial construction the LPLF has operated continuously. Approximately 279,000 cubic yards of airspace remains out of the design available airspace of 994,000 cubic yards.
- TCM maintains an Operations Plan for the landfill operations as required by WAC 173-350-400
- TCM utilizes seven groundwater wells installed around the periphery of the landfill.

In addition to the above information provided by TCM, Stantec reviewed CH2M-Hill 2017 groundwater report which showed that measured groundwater levels closely match those used in the stability evaluation.

The September 2018 survey of the landfill showed that the overall slopes of the LPLF vary between 4H:1V and 3H:1V. There are localized areas of steeper slopes associated with the access roads but these would not affect overall stability.

CLOSING

Based on Stantec's review of the current status of the LPLF using the information provided by TCM and reports completed by qualified third-parties as well as the original analyses completed by Norwest, the stability of the LPLF slopes is judged to meet the regulatory criteria as described in 40 CFR 257.64.

If there are any additional questions or clarifications required, please do not hesitate to contact me using the information below.

Regards,

Stantec Consulting Ltd.



Sean Ennis P.E.
Mining Leader - Vancouver

Phone: 604-631-4102
sean.ennis@stantec.com

Attachment: None
c. C.C.

sea centralia pit 7 lplf recertification rev1.docx



Stantec Consulting Ltd.
1830-1066 West Hastings Street Vancouver BC V6E 3X2

October 17, 2018

Certificate of Engineer

I, Sean Ennis, certify that all the information presented in this Memorandum is true and correct to the best of my knowledge and information.

Item	Date of Preparation	Title
Memorandum	October 17, 2018	Centralia Pit 7 LPLF Recertification – Rev1

Sean Ennis, P.E. - Washington State P.E. No. 40496
Expires: August 28, 2020



EXPIRES *AUG. 28/20*