## INSPECTION REQUIREMENTS FOR CCR LANDFILLS

# 40 CFR 257.84(b) Annual Inspections by a Qualified Professional Engineer

- (1) Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:
  - (i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record; and
  - (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.
- (2) The qualified professional engineer must prepare a report following each inspection that addresses the following:
  - (i) Any changes in geometry of the structure since the previous annual inspection;
  - (ii) The approximate volume of CCR contained in the unit at the time of the inspection;
  - (iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and
  - (iv) Any other change(s) which may have affected the stability or operation of the CCR Unit since the previous annual inspection.

## TRANSALTA CENTRALIA MINING LLC

## LIMITED PURPOSE LANDFILL, ANNUAL INSPECTION REPORT

#### **Date, Time and Weather Conditions of the Inspection:**

The annual inspection of the Coal Combustion Residual (CCR) unit, the TransAlta Centralia Mining LLC (TCM) Limited Purpose Landfill (LPLF) was conducted on **January 05, 2017** beginning at around 9:30AM. The inspection was conducted by Steven J. Mahr, a qualified professional engineer, and accompanied by Dennis N. Morr, Jr., the manager of landfill operation.

Weather conditions at the time of inspection were cold and cloudy.

## In accordance with the requirement the following observations were made during the inspection:

#### **Review of available information**

The CCR Operation records were reviewed for the CCR unit, otherwise known as the TCM LPLF. This included the weekly landfill inspection reports on file for the calendar year of 2016. Also reviewed were the weekly fugitive dust control inspection reports. No issues or items of concern developed from the records review.

#### **Visual Inspection of the CCR unit**

As noted above, a visual inspection of the TCM LPLF was conducted on January 05, 2017. The inspection began by driving around the perimeter access roads as an initial assessment of the landfill. This was followed by physically walking around the toe of the TCM LPLF and examining the slopes for structural integrity.

It was noted that TCM had installed two additional groundwater monitoring wells in August 2016 as part of the development of the groundwater monitoring plan for the CCR unit. The wells are identified as LPLF-2R and LPLF-7R.

## (1) Changes in Geometry

No changes to the geometry of the structure since the January 11, 2016 annual inspection are noted. The TCM LPLF footprint is built to the design; the Stage 1 area is filled to capacity and has an intermittent cover atop the fill; and the Stage 2 area is the active fill. At present the Stage 2 area has an intermittent cover atop the fill and activities on the fill have been suspended until the summer of 2017.

### (2) Approximate Volume of CCR Contained in the Unit

Records indicate that the TCM LPLF contains approximately **490,178 cubic yards** of approved waste materials. No additional waste material was added to the landfill in 2016.

## (3) Structural Integrity of the CCR unit

Based on the observations made during the perimeter inspection and the physical walk around the toe of the TCM LPLF there were no appearances of actual or potential structural weakness of the landfill. **No conditions were observed** at the time of inspection to indicate a disruption of or have the potential to disrupt the operation and safety of the landfill.

#### **CERTIFICATION OF ENGINEER:**

By means of this certification, I attest that I am familiar with the requirements and provisions of Title 40 CFR Section 257.84(b), that I, Steven J. Mahr, a registered professional engineer in the State of Washington have visited and examined the CCR unit identified in this report, and that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.

