

# NUCLA STATION ASH DISPOSAL FACILITY POST-CLOSURE PLAN

Tri-State Generation and Transmission Association, Inc.

**Submitted To:** Tri-State Generation and Transmission Association, Inc.

1100 West 116<sup>th</sup> Avenue Westminster, Colorado 80234

Submitted By: Golder Associates Inc.

44 Union Boulevard, Suite 300 Lakewood, Colorado 80228



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#### 1.0 INTRODUCTION

Tri-State Generation and Transmission Association, Inc. (Tri-State) owns and operates the Nucla Generating Station, a 100-megawatt circulating fluidized bed coal-fired electric generating plant located near the town of Nucla, Colorado. Tri-State disposes of coal combustion residuals (CCRs) from the Nucla Generating Station in an existing Tri-State-owned CCR landfill, the Nucla Station Ash Disposal Facility (the Facility), which is located approximately 5.5 miles southeast of the Nucla Generating Station. Within the 81.65-acre property, the CCR disposal footprint comprises approximately 61 acres.

Golder Associates Inc. (Golder) has prepared this post-closure plan for the Facility on behalf of Tri-State to serve as the initial written post-closure plan required under 40 CFR 257.104(d). The Facility will be closed with CCRs left in place in accordance with the requirements of 40 CFR 257.102(d). At the completion of closure activities in accordance with the closure plan for the Facility, the post-closure care period will commence. This post-closure plan includes a description of the inspection, maintenance, and monitoring activities that will be conducted for post-closure care of the Facility and the frequency for conducting these activities; contact information for the office to contact about the Facility during the post-closure care period; and a description of the planned use of the property on which the Facility is located during the post-closure care period.



#### 2.0 POST-CLOSURE PLAN

During the post-closure care period for the Facility, Tri-State will implement inspection, maintenance, and monitoring programs to maintain the integrity of the final cover system, maintain the groundwater monitoring system, and monitor groundwater in accordance with the requirements of 40 CFR 257.90 through 257.98. The post-closure care period will be 30 years in duration. If Tri-State is operating under assessment monitoring in accordance with 40 CFR 257.95 at the conclusion of the post-closure care period, Tri-State will continue to conduct post-closure care until it can return to detection monitoring in accordance with 40 CFR 257.95. Within 60 days following the completion of the post-closure care period, Tri-State will prepare a notification certified by a qualified professional engineer that post-closure care has been completed in accordance with the post-closure plan and will place the notification in the operating record.

## 2.1 Inspection

Regular inspections will be conducted during the post-closure care period to help ensure that the integrity of the Facility is maintained. The final cover system will be inspected for signs of settlement, subsidence, erosion, and other damage or deficiency. Surface water control features, including terrace channels, downchute channels, perimeter channels, and culverts, will be inspected to verify that the run-on and run-off controls are adequately limiting erosion and other damage to the final cover system. Surface water control features will also be inspected for erosion damage and clogging by sediment, weeds, and other debris. Surface components of groundwater monitoring wells will be inspected for damage.

Inspections will be conducted on a monthly basis during the first year of the post-closure care period. After the first year, the minimum inspection frequency will be annual. Inspection forms will be completed to document each inspection. Completed inspection forms will be maintained in the operating record. In order to maintain consistency in the inspection process, trained Tri-State employees or contract employees will conduct the inspections. Issues identified during the inspections will be reported to the person responsible for compliance with this post-closure plan as soon as practical.

#### 2.2 Maintenance

Tri-State will oversee post-closure maintenance of the Facility, using appropriate internal resources and/or third-party personnel and equipment. Post-closure maintenance of the Facility will include making necessary repairs to the final cover system to maintain its integrity and effectiveness. Earthen fill will be placed as needed to correct the effects of settlement, subsidence, and erosion and to prevent run-on and run-off from eroding or otherwise damaging the final cover system. Maintenance of surface water control features will include clearing excess sediment and debris and armoring or implementing other appropriate measures in areas of persistent erosion. The final cover system will be reseeded in areas that have been repaired and where additional vegetation is needed to effectively limit erosion and promote transpiration of soil moisture.





Cracks or erosion gullies measuring greater than one foot in width or depth will be repaired within one month of observation. The deficient areas will be filled with earthen material comparable in quality to the earthen material used to construct the final cover system. The earthen material will be placed, compacted, and shaped to match the surrounding grades. Following the repairs, the affected area will be reseeded with a similar seed mixture to the one used to establish the original vegetative cover. Tri-State will control noxious weeds and unwanted trees and shrubs from becoming established on the Facility.

## 2.3 Monitoring

Groundwater monitoring will be conducted during the post-closure care period in accordance with the requirements of 40 CFR 257.90 through 257.98. Groundwater samples will be collected and analyzed in accordance with the sampling and analysis program for the Facility. Results of the analyses will be placed in the operating record. Monitoring of vegetation established for the final cover system will be conducted in accordance with the engineering design and operations plan for the Facility.

#### 2.4 Contact Information

Contact information for the office to contact about the Facility during the post-closure care period is as follows:

Office of the Senior Vice President, Policy & Compliance/Chief Compliance Officer Tri-State Generation and Transmission Association, Inc. P.O. Box 33695

Denver, CO 80233-0695 Telephone: (303) 452-6111

E-Mail: environmental@tristategt.org

#### 2.5 Planned Uses

The surface of the final cover system for the Facility will be passive open land during the post-closure care period. The property on which the Facility is located will be secured via a locking gate and perimeter fencing to discourage illegal dumping and unauthorized access. No agricultural, recreational, public, or otherwise active uses are planned for the Facility during the post-closure care period. There will be no grazing or feeding of farm or domestic animals at the Facility during the post-closure care period.





# 3.0 CERTIFICATION

The undersigned attest to the completeness and accuracy of this post-closure plan and certify that the post-closure plan meets the requirements of 40 CFR 257.104(d).

**GOLDER ASSOCIATES INC.** 

Jason Obermeyer, PE Associate and Senior Engineer Tammy Rauen, PE Senior Project Engineer 1657746

Established in 1960, Golder Associates is a global, employee-owned organization that helps clients find sustainable solutions to the challenges of finite resources, energy and water supply and management, waste management, urbanization, and climate change. We provide a wide range of independent consulting, design, and construction services in our specialist areas of earth, environment, and energy. By building strong relationships and meeting the needs of clients, our people have created one of the most trusted professional services organizations in the world.

Africa + 27 11 254 4800
Asia + 852 2562 3658
Australasia + 61 3 8862 3500
Europe + 356 21 42 30 20
North America + 1 800 275 3281
South America + 56 2 2616 2000

solutions@golder.com www.golder.com

Golder Associates Inc. 44 Union Boulevard, Suite 300 Lakewood, Colorado 80228

Tel: (303) 980-0540 Fax: (303) 985-2080

