

# REPORT

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## *Annual C-Pond Closure Progress Report* 2021 *Greenidge Power Generating Station*



**Greenidge Generation LLC**  
**Dresden, New York**

**November 29, 2021**

Prepared by



ENGINEERING +  
ENVIRONMENTAL

**EnSol, Inc.**

661 Main Street  
Niagara Falls, New York 14301

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# 1. Introduction

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The Greenidge Power Generating Station (Greenidge Station), an electrical generating plant in the Town of Torrey, Yates County, New York is owned and operated by Greenidge Generation LLC (Greenidge). Greenidge submitted a demonstration of site-specific alternative deadline to complete closure of an existing CCR surface impoundment, as provided in 40 CFR 257.103(f)(2) on November 30, 2020. The requested approval by the U.S. Environmental Protection Agency (US EPA) will allow Greenidge to continue using an existing CCR surface impoundment known as the “C-Pond” after April 11, 2021 for non-CCR wastestreams. Greenidge plans to complete closure of the C-Pond no later than October 17, 2023 as required by 40 CFR 257.103(f)(2)(iv)(B).

Until that time, Greenidge shall continue to operate in full compliance with all applicable Subpart D, 40 CFR 257 Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments (i.e., CCR Rule) requirements including preparation of this annual progress report. This report shall be placed in the Greenidge Station Operating Record by the November 30th deadline per 40 CFR 257.105(i)(20) followed by written notification to the State Director and internet posting on the publicly accessible internet site [www.greenidgeccr.com](http://www.greenidgeccr.com), per 40 CFR 257.106(i)(20) and 107(i)(20), respectively.

## 1.1 Background

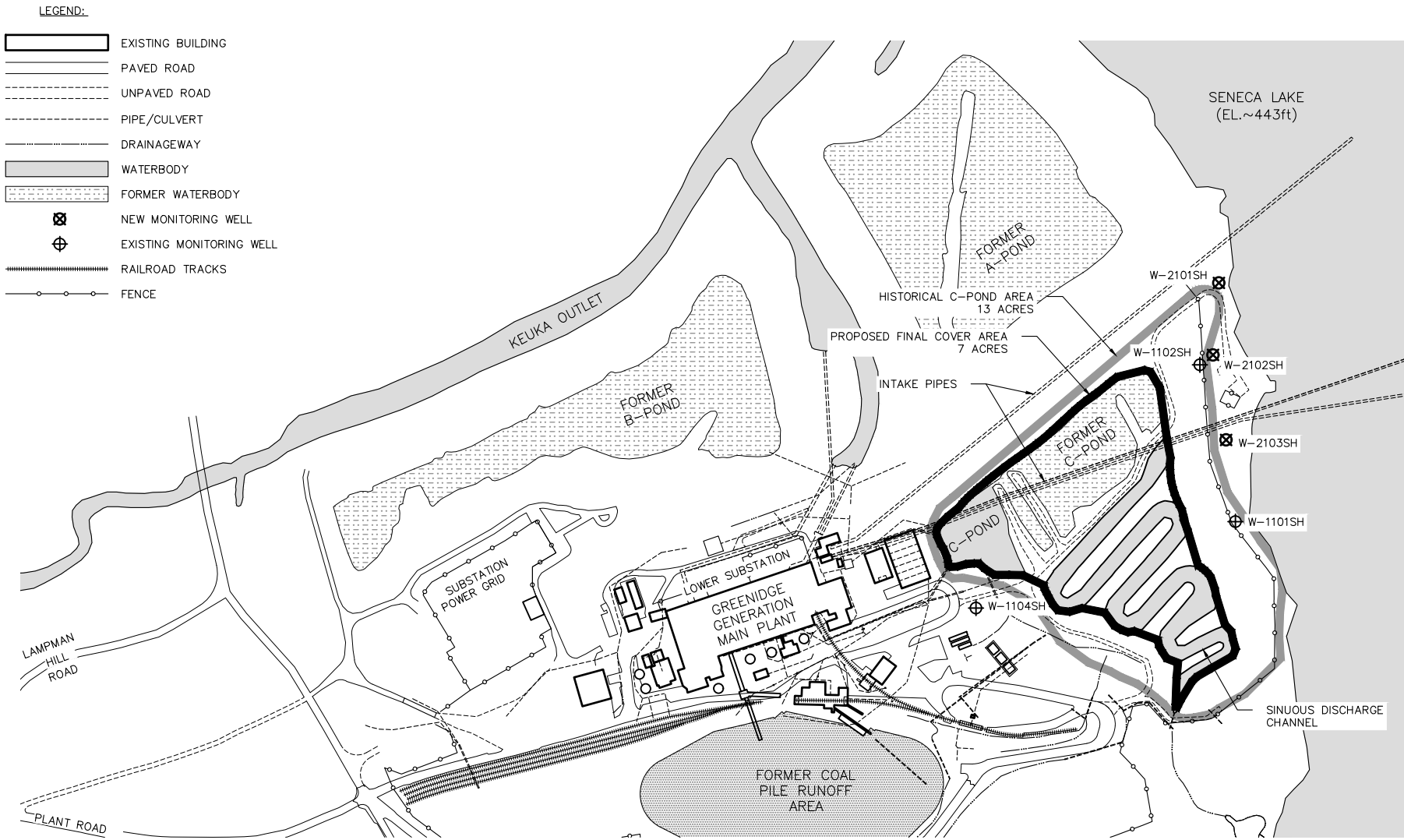
The current C-Pond footprint is approximately 7.24 acres. The area consists of the main pond and an overflow area, both of which connect via culverts to a sinuous channel which discharges the overflow from C-Pond to Seneca Lake (See Figure 1). A State Pollutant Discharge Elimination System (SPDES) permit (No. NY0001325) issued by the New York State Department of Environmental Conservation (NYSDEC) is maintained to discharge the overflow.

Historically, C-Pond received CCR flows from the bottom ash sluice system, however, the sluice system was taken out of service after Greenidge Station converted its fuel source from coal to natural gas in 2017. Current wastestreams to C-Pond consist of non-CCR flows only, including the low volume waste system, as defined in 40 CFR 423.11(b), treated runoff from the former coal pile storage area, and stormwater runoff from site rooftops, access roads, and other paved and vegetated areas. Greenidge has no other surface impoundment or stormwater management ponds onsite. C-Pond currently receives all surface water runoff and process waters discharged from the site, with the exception of the condenser cooling water which discharges to the north of the Station through a surface water discharge channel to Keuka Outlet. Therefore, C-Pond is essential to operation of the Site.

## 1.2 Compliance Requirement

Per 40 CFR 257.103(f)(2)(x), to continue to qualify for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain the owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the closure of the CCR surface impoundment. The owner or operator has completed the progress report when the report has been placed in the facility's operating record as required by 40 CFR 257.105(i)(20).

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**SITE PLAN**  
**2021 ANNUAL C-POND CLOSURE PROGRESS REPORT**

**GREENIDGE GENERATION LLC**

**EnSol**  
 661 Main St.  
 Niagara Falls, NY 14301  
 716.285.3920

TOWN OF TORREY  
 COUNTY OF YATES  
 STATE OF NEW YORK  
**NOVEMBER 2021**  
 30-0021-06

**FIGURE**  
**1**

## **2. Alternative Capacity**

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EnSol, Inc. prepared an Alternative Disposal Capacity Review Report for the Greenidge C-Pond in accordance with the requirements of 40 CFR 257.103(f)(2) dated November 2020. The purpose of the report was to document Greenidge's analysis of on and offsite disposal capacity options for management and treatment of non-CCR wastestreams which discharge into the C-Pond. Several on and offsite disposal options for non-CCR wastestreams, were evaluated as required by 40 CFR 257.103(f)(2)(v)(A).

Based on the evaluation, it was determined that neither onsite or offsite alternative capacity existed for Greenidge's non-CCR wastestreams at that time. Of the numerous alternative disposal options evaluated, one or more might have been adaptable for a given inflow, but no single option would work efficiently for all sub-outfalls. Therefore, the only viable option for C-Pond was to continue receiving non-CCR wastes as required by the Greenidge Station SPDES permit until NYSDEC established new permit conditions acceptable to both Greenidge and the US EPA.

While a number of actions toward developing alternative capacity have been completed to date as discussed in Section 3, this conclusion still stands.

### ***3. Progress Toward Closure***

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In the past year, Greenidge has accomplished a number of tasks that move the Facility closer to realizing closure of C-Pond. These tasks include, installation of additional monitoring wells, drainage infrastructure investigation, survey data gathering, elimination of potential pollution sources to C-Pond, and the development and evaluation of viable options for rerouting of the non-CCR wastestreams. A description of each task and how it contributes toward C-Pond closure is provided below.

Three new down gradient monitoring wells were installed in March of 2021. The locations of the three new monitoring wells (W-2101, W-2102, and W-2103) are shown on the Site Plan in Figure 1. The new wells were necessary for the closure project because the locations of the existing downgradient wells (W-1101 and W-1102) were considered too close to the closure area, and therefore, subject to the potential for damage during closure construction.

The drainage infrastructure investigation and survey data gathering are still ongoing but nearing completion. These efforts have been used to update drainage schematics for both process waters and stormwaters. From the updated schematics, the pollution potential of each non-CCR wastestream that enters C-Pond have been identified. These efforts have also been used to update the drainage areas that contribute stormwater runoff to C-Pond. This information was used to develop viable options for re-routing those non-CCR wastestreams managed by C-Pond. Thoughtful evaluation of these options will conclude with a preferred concept.

Work to eliminate potential pollution sources from legacy processes and equipment has begun to broaden the number of viable options. Such work includes the development of a project manual and invitation to bid to remove out-of-service fuel oil tanks in accordance with applicable tank closure requirements and their secondary containment that currently batch discharge to C-Pond.

An updated C-Pond Closure Plan Schedule is provided in Attachment A. The C-Pond Closure Plan Schedule has been updated to show the work that has been completed. The remaining tasks have been revised based on the knowledge gained over the past year. SPDES Permitting tasks are next on deck. Coordination of a mutually agreeable meeting date with the NYSDEC to kick off these efforts is currently underway.

***Attachment A***

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**C-Pond Closure Plan Schedule**

# C-POND CLOSURE PLAN SCHEDULE

