
NV ENERGY - REID GARDNER GENERATING STATION FACT SHEET

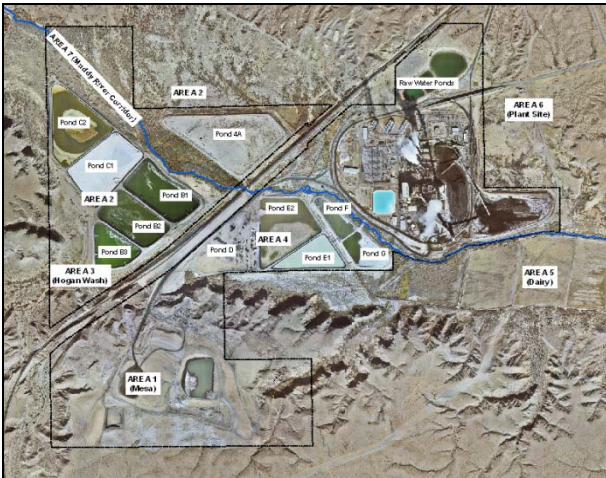
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Location

NV Energy owns and operates the Reid Gardner Generating Station (Site), which is located near Moapa, Nevada. The electricity producing facility is situated about 52 miles northeast of Las Vegas and became commercially operational in 1965.

Details of the remediation project including maps, reports, and associated documentation are available for public inspection at the Document Repository located at the Moapa Town Library, 1340 East Highway 168, Moapa, NV
Phone: (702) 864-2438.



Background

The Reid Gardner Generating Station is located within the Moapa Valley, which is a relatively flat-bottomed desert valley that includes the Muddy River, a spring-fed perennial stream that runs through the Site property. Prior to 1964, the area was native desert or irrigated pastureland. A dairy

was previously operated on the land east of the Site along both sides of the Muddy River. This is private property and is largely vacant. The Bureau of Land Management owns most of the vacant surrounding land to the north and south of the Site, but there is an additional parcel of vacant private property just north of the Site.

The Site includes a nominal 557-megawatt coal-fueled, steam-electric generating plant with four operating units. The first two 100-megawatt generating units went into service in 1965 and 1968. A third 100-megawatt unit was added in 1976, followed by a 257-megawatt unit that was commissioned in 1983.

The Site gets its water supply from a combination of off-Site groundwater wells and off-Site surface water withdrawals from the Muddy River. The water is combined and stored in raw water storage ponds.

Water is used on-Site for process cooling, air emission reductions, and other uses. To reduce water usage, the Site recycles its water as much as possible. When the recycled water reaches a point of having too many suspended solids, it is discharged to one of several lined evaporation ponds. Additionally, some water used to reduce sulfur emissions is sent to on-Site ponds. There are no surface water discharges of wastewater from the Site.

The evaporation ponds were originally designed and constructed according to the best available engineering practices and regulations in effect at the time. The early ponds, for example, used a clay material liner with clay berms. Today, all new ponds are double-lined with an inner leak-detection layer to assure that water cannot seep into surrounding soils or groundwater. Prior to today's lining technologies used in new ponds at the Site, water containing elevated solids migrated through the clay material and into the area groundwater.

This has necessitated remediation (clean-up) activities in cooperation with the State of Nevada.

Remediation Overview

The State of Nevada Division of Environmental Protection (NDEP), Bureau of Corrective Actions (BCA) has primary authority and responsibility for regulatory oversight of groundwater and soil characterization and clean-up activities at the Site.

In May 1997, the NDEP issued Administrative Order No. NV052797W1 requiring NV Energy to submit a site-wide plan and schedule to eliminate the migration of contaminants into the groundwater. In compliance with the order, NV Energy submitted a plan and a schedule committing to either line all wastewater ponds with double synthetic liner systems or remove the ponds from service by April 2010.

To date, NV Energy has installed liner systems in seven evaporation ponds (Ponds 4C1, 4C2, 4B1, 4B2, 4B3, E1, and E2) and one ash settling pond (Pond F). Additionally, the company closed three ponds (Ponds 4A, D and G) and constructed one new ash water settling pond with a single-liner system (Mesa Pond). With this work, NV Energy has completed the requirements of the 1997 Order.

NV Energy and the NDEP entered into an Administrative Order on Consent (AOC) for the Site on Feb. 22, 2008. The AOC calls for NV Energy to continue with environmental contaminant characterization activities and for the identification of corrective actions and/or clean-up measures for the soil and groundwater at the Site. Additionally, the AOC calls for the implementation and long-term operation and maintenance of NDEP-approved clean-up measures for the Site.

In addition to the groundwater contamination associated with the on-Site ponds, various other isolated areas of soil and/or groundwater contamination have been identified. All areas of soil and groundwater contamination associated with the Site operations will be addressed through implementation of the AOC by sampling soil and groundwater to characterize site contamination and then, as appropriate, through NDEP-approved clean-up activities.

The following people have been designated as the primary community liaisons for the Reid Gardner Site:

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Reports completed to date and located in the Information Repository at the Moapa Town Library includes:

1340 E Highway 168
Moapa, NV 89025

- Encyclopedia of Supporting Documentation – List of historical documents that provide background information.
- Document and Response to Comments Tracking System – System used to document NV Energy’s responses to NDEP’s comments on draft reports.
- Closure Plan - “Road map” that describes process by which site remediation will be completed.
- Health and Safety Plan - Describes precautions taken to protect health and safety of personnel conducting field activities.
- Community Relations Plan – Describes how community will be involved during implementation of the AOC.
- Quality Assurance Project Plan – Describes measures to ensure data collected and used for decision making meet quality assurance/quality control standards.
- Preliminary Site Related Chemicals (SRC) Document – Describes chemicals that may exist in soils or groundwater at the site based on available information.
- Waste Management Unit 7 (WMU-7) Sampling and Analysis Plan – Outlines soil testing to be conducted at an area previously used for disposal of solid waste from the facility.
- Sampling and Analysis Plan for Diesel Impact to Soil – Outlines soil testing to be conducted in the vicinity of the above ground diesel fuel storage tank.
- Pond D Solids Removal Work Plan - Outlines pond solids removal and sampling activities in the Pond D area.
- Pond G Solids Removal Work Plan - Outlines pond solids removal and sampling activities in the Pond G area.
- Evaluation of Background Conditions Work Plan – Outlines soil and groundwater testing activities to better understand background contaminant concentrations.

The following activities are planned in 2010:

WMU-7 Sampling and Analysis Report (SAR)

An investigation was conducted in November 2009 in general accordance with the NDEP-approved WMU-7 Sampling and Analysis Plan. The results of this investigation will be summarized in a report that will be submitted to NDEP for approval.

WMU-7 Corrective Action Alternative Study (CAAS)

Once the WMU-7 SAR has been approved by the NDEP, a CAAS will be developed that evaluates remediation alternatives. This report will be submitted to NDEP for approval.

Diesel Impacted Soil SAR

An investigation was conducted in November 2009 in general accordance with the NDEP-approved Diesel Impact to Soil Sampling and Analysis Plan. The results of this investigation will be summarized in a report that will be submitted to NDEP for approval.

Background Sampling

Soil and groundwater sampling will be conducted in accordance with the Evaluation of Background Conditions Work Plan, once it is approved by the NDEP. The results will be used to evaluate background concentrations of parameters in soil and groundwater for the Site. Soil and groundwater concentrations detected during site characterization will be compared with these background levels to evaluate whether soil and groundwater have been impacted by site activities. A report will be prepared summarizing the results and will be submitted to NDEP for approval.

Pond D Solids Removal

Pond D was previously used to evaporate wastewater, but was taken out of service in 2001. The salt/ash remaining in the pond will be removed and disposed in accordance with the Pond D Solids Removal Work Plan approved by the NDEP. Upon completion, a Pond D Solids Removal Report will be submitted to NDEP for approval.

Pond G Solids Removal

Pond G was previously used to settle ash out of scrubber wastewater from air pollution control equipment. This pond was taken out of service in 2008. The solids will be removed and disposed in accordance with the Pond G Solids Removal Work Plan approved by the NDEP. Upon completion, a Pond D Solids Removal Report will be submitted to NDEP for approval.

Preliminary Source Identification

Once the Conceptual Site-Wide Model (CSM) approach has been approved by NDEP, a report summarizing potential sources of soil and groundwater impacts at the site will be submitted to NDEP for approval.

Source Material Sampling Activities

Once the CSM approach has been approved by NDEP, a Source Material SAP will be prepared that identifies potential source materials (e.g., pond solids, wastewater, etc.) at the Site. This report will also contain a sampling and analysis plan that will be implemented upon approval by NDEP.