



**COAL COMBUSTION RESIDUALS (CCR)
FUGITIVE DUST CONTROL PLAN
REVISION 01**

**REID GARDNER GENERATING STATION
501 WALLY KAY WAY
MOAPA, NEVADA**

APRIL 17, 2017

Certification and Change Record

I certify that that this Coal Combustion Residuals Fugitive Dust Control Plan for Reid Gardner Generating Station meets the requirements set forth in 40 *Code of Federal Regulations*, Part 257.80(b).



Revision Date	Certified By	Revision	Description of Changes
October 15, 2015	Jennifer Claghorn, PE /CH2M HILL	0	Initial Plan
April 17, 2017	Jennifer Claghorn, PE /CH2M	1	-Added Ponds B1, B2, B3, and E1 to address rule change -Added change record -Modified facility description and procedures to reflect station retirement

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1.0 FACILITY AND OWNER INFORMATION

Facility Name Reid Gardner Generating Station

Facility Location 501 Wally Kay Way
Moapa, Nevada 89025
(702) 402-1354

Owner NV Energy
6226 W. Sahara Avenue
Las Vegas, Nevada 89146-0001

2.0 INTRODUCTION

This Coal Combustion Residuals (CCR) Fugitive Dust Control Plan was developed to identify and describe procedures to minimize potential fugitive dust emissions from CCR units, roads and other CCR management and material-handling activities at the Reid Gardner Generating Station, located approximately 50 miles northeast of Las Vegas, Nevada, near Moapa, Nevada. This plan is prepared and implemented in accordance with 40 *Code of Federal Regulations* 257.80.

This plan describes the CCR fugitive dust control measures that are used to minimize CCR from becoming airborne at the facility along with an explanation of how the measures selected are applicable and appropriate for site conditions, procedures to emplace CCR as conditioned CCR, procedures to log citizen complaints involving CCR fugitive dust events at Reid Gardner Generating Station and procedures that are followed to periodically assess the effectiveness of the plan and amend the plan as needed.

In accordance with §257.80(d), this plan will be placed in the Reid Gardner Generating Station's operating record and on NV Energy's publicly accessible Internet site.

3.0 CCR FUGITIVE DUST CONTROL MEASURES

Reid Gardner Generating Station is a former coal-fired, electric power generating station that retired the last of four units on March 22, 2017 (Standard Industrial Classification Category 49119).

The CCR units at Reid Gardner Generating Station consists of two existing CCR surface impoundments (Mesa Ponds M5 and M7), four inactive CCR surface impoundments (Ponds B1, B2, B3, and E1) and a CCR landfill. The sections below describe the control measures that will be implemented at Reid Gardner Generating Station to minimize fugitive dust from becoming airborne at the CCR units.

3.1 CCR Surface Impoundment Dust Control Measures

3.1.1 Existing CCR Surface Impoundment Dust Control Measures

The Mesa Ponds M5 and M7 are existing CCR surface impoundments and subject to the CCR Rule. Mesa Ponds M5 and M7 are permitted by the Nevada Division of Environmental Protection, Bureau of Water Pollution Control, under the discharge permit NV91022 and the State of Nevada Department of Conservation and Natural Resources under the Dam Safety Permit J-652. Located on the mesa to the east of the CCR landfill, the ponds are earthen embankments lined with two layers of 80 mil high-density polyethylene geomembrane with interstitial leak detection and collection systems. The primary CCR material accepted by these evaporation ponds originates from the flue gas desulfurization system. The evaporation ponds also accept other materials generated on-site, as authorized by Discharge Permit NV91022.

Procedures used to control CCR fugitive dust in the Ponds M5 and M7 areas include the following:

- Because the Mesa Ponds M5 and M7 are currently filled with water, there is very little potential for fugitive CCR dust generation from the ponds.
- As the amount of CCR and other permitted wastewater being forwarded to the ponds decreases, evaporation may expose solid CCR waste (known as Glauber's salt) in the ponds. Measures that will be used to minimize surface disturbances in these areas may include installing a soil cover, applying water and/or applying palliative to form a visible surface crust.
- Activities with the potential to generate dust will be regularly monitored:
 - Fugitive dust control monitoring is the responsibility of all Reid Gardner Generating Station personnel and contracted workers.
 - Communications between water truck operators and plant supervisors will be established (via regular reports, cellular phones or radios) to direct watering efforts to areas with the greatest potential to generate dust.
 - Pond areas will be inspected and documented periodically.
 - The effectiveness of dust suppression procedures will be evaluated periodically using the inspection results.

3.1.2 Inactive CCR Surface Impoundment Dust Control Measures

Ponds B1, B2, B3, and E1 are inactive CCR surface impoundments and subject to the CCR Rule. The ponds are permitted by the Nevada Division of Environmental Protection, Bureau of Water Pollution Control under the discharge permit NV91022 and the State of Nevada Department of Conservation and Natural Resources under the Dam Safety Permits J-613, J-614, J-615, and J-618. Located west of the former power generating units, and near the banks of the Muddy River, the ponds were earthen embankments lined with two layers of high-density polyethylene geomembrane with interstitial leak detection and collection systems. The ponds stopped accepting CCR before the effective date of the CCR Rule, and they are currently being closed. The ponds have been dewatered, and the CCR and bottom liner systems are being removed for disposal.

Procedures that may be used to control CCR fugitive dust in Ponds B1, B2, B3 and E1 areas include the following:

- During the closure process, a solid CCR waste, known as Glauber's salt, may become exposed. Measures that will be used to minimize surface disturbances in these areas may include installing a soil cover, applying water and/or applying palliative to form a visible surface crust.
- Activities with the potential to generate dust will be regularly monitored:
 - Fugitive dust control monitoring is the responsibility of all Reid Gardner Generating Station personnel and contracted workers.
 - Communications between water truck operators and plant supervisors will be established (via regular reports, cellular phones or radios) to direct watering efforts to areas with the greatest potential to generate dust.
 - Pond areas will be inspected and documented periodically.
 - The effectiveness of dust suppression procedures will be evaluated periodically using the inspection results.

3.2 **CCR Landfill Dust Control Measures**

The landfill on the mesa located southwest of the plant is also a CCR unit and is permitted as a Class III Landfill (Permit Number LF006-CMF-01). Fly ash, bottom ash and pond solids are the primary CCR solid wastes disposed of in this landfill, but the permit also allows for the disposal of other non-CCR solid wastes generated onsite. In addition to the landfill, the ash haul road leading to the landfill is subject to spillage and can be a potential CCR fugitive dust source.

Procedures used to control CCR fugitive dust in landfill areas include the following:

- For the landfill areas, the following general procedures will be implemented to control CCR fugitive dust:
 - The potential to produce fugitive dust will be considered when selecting specific means, methods and techniques to complete work.
 - Dust palliatives may be applied on NV Energy-owned property. Only raw water and dust palliatives approved by the Bureau of Land Management can be used on

Bureau of Land Management lands. When used, the palliative is mixed with water and sprayed from the trucks/trailers.

- Landfill operations may be modified during periods of high wind or other unfavorable weather conditions.
- Landfill operations may be temporarily limited if procedures fail to control dust.
- Good housekeeping will be practiced in the landfill areas at all times.
- Handling and placement of CCR wastes at the Reid Gardner Generating Station involve loading, unloading and hauling of wastes that have the potential to produce CCR fugitive dust. The following procedures will be used to minimize CCR fugitive dust from waste handling and placement:
 - CCR wastes will be moisture-conditioned as the trucks are loaded. Per §257.80(b)(2), conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust-suppression agent.
 - Drop heights when loading, unloading and/or handling materials will be minimized.
 - When transporting dry or potentially dusty material that may release fugitive dust, haul vehicles will be driven at slower speeds and/or have loads covered with tarps and/or be moisture-conditioned.
- Landfill work areas include working areas where active waste placement and cover activities are occurring. This activity involves earthmoving, loading and unloading of wastes and disturbing areas that have the potential to produce CCR fugitive dust. The following procedures will be used to minimize CCR fugitive dust from landfill work areas:
 - Work areas will be limited in size to reduce the potential to generate dust. Generally, work area size will be limited to that necessary to safely and efficiently complete work. When conditions are favorable, the size of the work area, to include the Working Face(s), may be increased.
 - At the end of each day, a soil cover or alternative daily cover may be applied to the waste. The soil cover activities at the landfill include truck loading, cover dumping from the truck and cover spreading. The soil cover is generally obtained from a nearby borrow source. As an alternative to placing cover, the landfill may be operated on a continuous basis so that watering, material handling equipment and personnel are on-site to control fugitive dust.
 - Water may be actively applied to moisture condition work areas to prevent the release of fugitive dust and promote compaction when needed. Water will be applied by water trucks equipped with pumps and sprayers (or similarly equipped water wagons or trailers). Operators or contracted staff may use hoses or water cannons to wet hard-to-reach areas.
 - At least one water truck will be available to serve the Working Face(s) and associated road(s) during routine landfill operations.

- Additional water truck(s), if needed, will be available to moisture condition additional Working Face(s), construction projects in the CCR landfill footprint (for example, stormwater system construction, cover maintenance and final cover placement) and associated road(s).
 - Watering will be limited to allow safer vehicle operation and reduce mud and run-off.
- Haul roads to the landfill and within the landfill may be subject to spillage and can be a CCR fugitive dust source. The following procedures will be used to minimize CCR fugitive dust from haul roads:
 - Water may be applied to moisture-condition roads to prevent the release of fugitive dust. Water will be applied by water trucks equipped with pumps and sprayers (or similarly equipped water wagons or trailers). Operators or contracted staff may use hoses or water cannons to wet hard-to-reach areas.
 - The haul road surface will be bladed to remove accumulated spillage. The windrowed material will be picked up and disposed of in the on-site landfill.
 - Traffic flows will be routed to reduce vehicle miles traveled and limit ground disturbance.
 - Vehicle speed will be reduced or limited to reduce dust from vehicle operation. Traffic on haul roads will be posted as a speed limit of 25 miles per hour.
- In addition to active work areas, inactive landfill areas may be a source of CCR fugitive dust. The following procedures will be used to minimize CCR fugitive dust from inactive disturbed landfill areas and closed landfill areas:
 - Continued vehicle travel will be prohibited on inactive landfill areas.
 - Other erosion and dust control methods that will be used at inactive landfill areas may include cover with soil, palliative applications to form a visible surface crust and/or revegetation. Only dust palliatives approved by the Bureau of Land Management may be applied on land owned by the Bureau of Land Management.
- Activities with the potential to generate dust will be regularly monitored:
 - Monitoring will be the responsibility of all Reid Gardner Generating Station personnel and contract workers.
 - Communications between water truck operators and supervisors will be established (via regular reports, cellular phones or radios) to direct watering efforts to areas with the greatest potential to generate dust.
 - Waste handling, work areas, haul roads and other areas of disturbance will be inspected periodically.
 - The effectiveness of dust-suppression procedures will be evaluated and documented based on periodic inspections.

4.0 CITIZEN COMPLAINT PROCEDURE

In accordance with the requirement of §257.80(b)(3), the procedure described below will be used to log citizen complaints involving CCR fugitive dust events at the Reid Gardner Generating Station.

4.1 Purpose of Procedure

The purpose of the procedure is as follows:

- Ensure that complaints are documented and fully investigated.
- Ensure that complaints are resolved quickly.
- Describe how complaints are analyzed and preventative action(s) applied to prevent similar complaints in the future.

4.2 Definitions, Terms and Abbreviations

Complaint: Reid Gardner Generating Station defines a complaint as a written or verbal expression of dissatisfaction with facility operating conditions resulting from CCR fugitive dust generation.

4.3 Reid Gardner Generating Station Procedure

4.3.1 Receiving Complaints

- Where non-written complaints are made to a member of staff, in person or via the telephone, polite interaction is expected at all times.
- All complaints, whether written or verbal, should be documented on the Citizen Complaint Form. The form should include the following information from the complaint: the nature of the complaint, the complainant's description of the problem and the contact information of the complainant.

4.3.2 Implementing Immediate Actions

- After documenting information about the complaint, all Citizen Complaint Forms shall be given to the Reid Gardner Generating Station Plant Supervisor, who will contact the Reid Gardner Generating Station Plant Director and the Environmental Department. If the complaint is received after normal operating hours, the Citizen Complaint Form will be completed by Plant security who will then call the Plant Supervisor by telephone. Security will provide the form to the Plant Supervisor the next morning.
- Investigative and corrective action(s) will be implemented as soon as practicable after receiving a complaint.
- All investigative and corrective action(s) should be documented on the Citizen Complaint Form.

4.3.3 Recording Complaint on Register

- After documenting information about the complaint and the immediate investigative and corrective actions taken, all Citizen Complaint Forms shall be forwarded to the Reid Gardner Generating Station Plant Director and the Environmental Department.
- A unique number will be assigned to each Citizen Complaint Form and information will be logged in the Citizen Complaint Register.

4.3.4 Reviewing and Additional Corrective Actions

- A thorough review of the complaint and corrective actions taken will result in a determination if any further remedial action(s) are necessary. The review will be carried out by interviewing any staff concerned and inspecting relevant operating, computer, manual and telephone records.
- Additional corrective action(s) will be implemented, as necessary. Any additional corrective action(s) required will be detailed on the Citizen Complaint Register.

4.3.5 Analyzing Complaints and Preventative Action

- The Citizens Complaint Register will be periodically reviewed to assess its effectiveness at addressing fugitive dust complaints.

4.3.6 Records Storage

- The Citizen Complaint Register will be maintained electronically to allow for easy and immediate retrieval.
- A record of all citizen complaints will be included in the annual CCR Fugitive Dust Control Report.

5.0 PLAN EVALUATION

Inspections of the CCR surface impoundments, landfill and fugitive dust measures outlined in this plan will be used to assess the effectiveness of this plan, in accordance with §257.80(b)(4). The procedure described below will be used to conduct and document the inspections.

5.1 Purpose of Procedure

The purpose of the procedure is to periodically assess the effectiveness of this plan. This procedure will also be used to document the actions taken by NV Energy to control CCR fugitive dust and the corrective measures taken, which are required to be summarized annually in the annual Dust Control Report required under §257.80(c).

5.2 Procedure

5.2.1 Any Observations of CCR Fugitive Dust or Control Measure Failure

- An individual who observes fugitive dust at any time from any CCR unit or failure of a control measure in this plan is to notify the Reid Gardner Generating Station Plant Supervisor, Plant Management or the Environmental Department. If possible, the issue should be resolved immediately. If the observation occurs after normal operating hours, notify Plant Security who will then call the Plant Supervisor, Plant Management, or the Environmental Department by telephone.
- Personnel receiving notification of fugitive dust from a CCR unit or failure of a control measure in this plan are expected to implement mitigating action(s) as soon as practicable.

5.2.2 Periodic Inspections

- Periodic inspections of the Reid Gardner Generating Station CCR units for fugitive dust and condition/status of control measures outlined in this plan will be conducted during daylight hours. The periodic inspections will be documented on a CCR Unit Inspection Form.
- The plan will be updated as necessary based on the periodic inspection results.

5.2.3 Annual CCR Fugitive Dust Control Report (§257.80(c))

- An annual CCR Fugitive Dust Control Report will be prepared and will contain a description of the actions taken by NV Energy to control CCR fugitive dust, a record of all citizen complaints and a summary of any corrective measures taken.
- Preparation of the annual CCR Fugitive Dust Control Report will consist of a review of the periodic CCR unit inspection forms, Citizen Compliant Forms and any other documentation concerning fugitive dust from CCR units, such as notices from any regulatory agency generated during the year preceding the report.
- The initial annual CCR Fugitive Dust Control Report was completed no later than 14 months after placing the initial CCR Fugitive Dust Control Plan in the Reid Gardner Generating Station operating record. The deadline for completing subsequent annual

CCR Fugitive Dust Control Reports is one year after the date of completing the previous annual CCR Fugitive Dust Control Report.

- A copy of the annual CCR Fugitive Dust Control Report will be placed in the Reid Gardner Generating Station CCR operating record and on the NV Energy publicly accessible CCR Internet site.

6.0 AMENDMENTS TO PLAN (§257.80(B)(6 AND 7))

This plan may be amended at any time. In addition, this plan will be amended whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

Once amended, the revised plan will be certified by a qualified professional engineer and the revised plan will be placed in the Reid Gardner Generating Station operating record and posted on the NV Energy publicly accessible Internet site.