UTAH DIVISION OF WATER QUALITY

IN THE MATTER OF **PacifiCorp Dba Rocky Mountain Power** **C/O Jeff Tucker, P.E.** **1407 W. North Temple St. Ste. 210** **Salt Lake City, UT 84116**	**DOCKET NUMBER I-16-06** **STIPULATED COMPLIANCE ORDER**

A. PURPOSE

This **STIPULATED COMPLIANCE ORDER** ("**SCO**") is entered into voluntarily by and between the Director of the Utah Division of Water Quality ("**DIRECTOR**"), and PacifiCorp dba Rocky Mountain Power ("**RMP**"). The **DIRECTOR** and **RMP** are jointly referred to hereafter as the "**PARTIES**." The purpose of this **SCO** is to resolve all issues (consistent with the Utah Water Quality Act, Title 19 Chapter 5 of the Utah Code (**ACT**) and other applicable law) related to the August 4, 2016, discharge of coal combustion residuals from a disposal site owned by **RMP** near Helper, Utah, into waters of the state.

B. AUTHORITY

1) The **DIRECTOR** of the **UTAH DIVISION OF WATER QUALITY** ("**DIVISION**") is authorized to issue, continue in effect, renew, revoke, modify or deny discharge permits and to issue orders in accordance with Utah Code Ann. (UCA) § 19-5-106, and to specify a schedule of compliance in a permit leading to compliance with the **ACT** pursuant to Utah Admin. Code (UAC) R317-8-5.2.

2) The **DIVISION** was created to administer the **ACT** under the immediate direction and control of the **DIRECTOR** pursuant to UCA § 19-1-105.

3) The U.S. Environmental Protection Agency (EPA) has delegated authority to the State of Utah to administer the National Pollutant Discharge Elimination System (NPDES) permit program under the Federal Clean Water Act (CWA), known in Utah as UPDES.

4) It is unlawful for any person to discharge a pollutant into waters of the state, unless the discharge is authorized by permit, Utah Code Ann. § 19-5-107(1)(a). See also Utah Admin. Code R317-1-2.1. Waters of the State means "all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state ... . " Utah Code Ann. § 19-5-102(23)(a).

5) It is unlawful to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water, or to place or cause to be placed any wastes in a location where there is probable cause to believe it will cause pollution. Utah Code Ann. § 19-5-107(1)(a).

6) Utah Admin. Code R317-2-7.2 prohibits any person from discharging or placing any waste or other substance in such a way that waters of the state will be or may: "become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures."

7) Utah Code Ann. § 19-5-107 (3)(a) states "It is unlawful for any person, without first securing a permit from the Director, to: make any discharge... not authorized under an existing valid discharge permit".

8) Utah Admin. Code R317-2-7.1 prohibits any person from discharging, or placing any wastes or other substances, in a manner that may interfere with waters' designated uses, or to cause any of the applicable standards to be violated.

C. FINDINGS

1) **RMP** is in the process of decommissioning its coal-fired Carbon Power Plant located approximately 2 miles north of Helper, Carbon County, Utah, at the intersection of US Highways 6 and 191. As part of the decommissioning process, a landfill used since the early 1960s for the disposal of the plant's coal combustion residues (also known as "coal ash") is in the process of being closed and capped with soil cover. This landfill is located approximately 1 mile south of the Power Plant at the mouth of Panther Canyon, a dry wash which drains into the Price River. The landfill itself is sited approximately 200 yards directly east of the Price River.

2) On March 28, 2016, **RMP** obtained a Construction Storm Water Permit from the Utah Division of Water Quality (UTR374431) for the landfill. Part of the measures used to control storm water drainage at this site were detention basins located directly above and below the landfill, and the diversion of storm water from the upper detention basin through a 48-inch corrugated metal pipe buried underneath the landfill. This drainage pipe originally discharged into the lower detention basin, which drained the water back into Panther Canyon Creek before it discharged into the Price River, but prior to August 4, 2016, the pipe had been extended to discharge directly into the creek bed. According to **RMP**, this system was designed to contain the flood waters created by a 50-year storm event.

3) On August 4, 2016, a large thunderstorm cell passed over the mouth of Panther Canyon. Beginning at approximately 2:00 PM until 4:00 PM it produced heavy rain which fell on the coal ash landfill site and in the upper reaches of the canyon. The rainfall appeared to reach its maximum volume at approximately 2:30 PM and continued at a heavy volume until approximately 3:00 PM. GeoStrata, the engineering consultant firm hired by **RMP** for the landfill capping project, estimated the total precipitation from the storm to be approximately 2 inches which according to their estimate would qualify as a 100- to 400-year storm event.

4) By approximately 2:45 PM on August 4, 2016, a large volume of runoff water, sediment, and debris had collected in the upper detention basin located directly above the landfill in Panther Canyon. According to reports from **RMP** and GeoStrata, this sediment and debris clogged the drainage pipe intake grating, which in turn caused the water level in the upper basin to rise and overflow the side of the basin. The flood water then flowed out of the upper drainage basin and over the top of the landfill, eroding a path in the coal ash pile as it flowed downhill.

5) As the flood water ran down the steep face of the landfill, it eroded a deep gully approximately 40 feet wide by 15 feet deep and 550 feet long in the coal ash pile. The flood water containing the eroded material quickly filled the lower drainage basin and at that point overflowed directly into the Price River. The erosion of the coal ash pile also uncovered the pipe extension installed at the lower basin and caused the water and debris from the pipe to discharge into the lower basin. Some of the eroded material flowed across the ground towards the south and was contained by a railroad grade which runs parallel with the river. The flood water continued to flow until approximately 3:30 PM, at which point it completely subsided.

6) **RMP** and its contractor, MK Weeden Construction, made proper notifications to the **DIVISION** and other local, state and federal government agencies, as well as private companies potentially impacted by the discharge. **RMP** and MK Weeden Construction immediately began cleanup and restoration of the landfill and flooded material. Included in this response was the collection of water samples from the catch basin and the Price River upstream and downstream from the point where the coal ash flow entered the river. As a result of the flood, the drainage system from above the landfill is being modified to accommodate larger storms.

7) On August 5, 2016, Department of Environmental Quality District Engineer Scott Hacking and **DIVISION** water sampler Ryan Parker performed an inspection of the landfill and flood area. As part of their investigation, they took samples near the point of discharge into the Price River, upstream near the Carbon Power Plant, and downstream in the City of Helper where the Price River runs through a city park. No dead fish or wildlife was noted during the inspection.

8) The samples taken immediately after the event on August 4, 2016, by **RMP** were analyzed by America West Analytical Laboratories in South Salt Lake, Utah, for Total Metals and Dissolved Metals, along with general water chemistry parameters including pH, Total Dissolved Solids, and Chloride. None of the water chemistry parameters or

levels of Dissolved Metals exceeded the numeric criteria specified in *Utah Admin. Code R317-2-14, Standards of Quality for Waters of the State*. However, the total metals levels of aluminum and iron were elevated in both the upstream and downstream samples to the point where they exceeded the dissolved metal standards after adjustment for water hardness. Similar analytical results were obtained from the water samples taken by the **DIVISION** on August 5, 2016. While no violations of the dissolved metal standards were evident, after adjustment the total metals levels of aluminum and iron exceeded water quality standards in all three samples.

9) **RMP** estimates the volume of coal ash that was discharged into the Price River on August 4, 2016, to be approximately 2,370 cubic yards, out of an estimated total of 6,700 cubic yards of coal ash and cover material eroded by the flood waters. In addition, based on the estimated volume of discharged material, **RMP** and GeoStrata estimate this incident resulted in a release of reportable quantities of arsenic and lead from the landfill site. Based on the concentrations of these metals present in the coal ash, the discharge released an estimated 13.9 pounds of arsenic and 35.9 pounds of lead into the Price River. According to information provided by RMP, the drainage system was repaired by August 7, 2016, and the cleanup of the entire site was completed August 10, 2016.

10) The release from the **RMP** coal ash landfill reached waters of the state as evidenced by reports from the company, confirmed by observations made on site by **DIVISION** employees.

11) The **DIRECTOR** has determined that this release is significant enough to warrant a penalty for the environmental impact associated with it. All **PARTIES** have agreed that settlement of this matter is in the best interest of the **PARTIES**.

12) The **DIVISION** has determined a penalty for **RMP** for this incident (Environmental Incident Report Number 12710) according to the guidelines found in *Utah Admin. Code R317-1-8 Penalty Criteria for Civil Settlement Negotiations*, and proposed it to **RMP** in an effort to resolve the incident. The Penalty Criteria considers such factors as the nature, severity and extent of the violations, history of noncompliance, degree of willfulness and/or negligence, good faith efforts to comply, and economic benefit.

13) Submittals required under this **SCO** shall be delivered or mailed to the Division of Water Quality, Department of Environmental Quality, 195 North 1950 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870.

D. AGREEMENT

The **DIRECTOR** and **RMP** agree to, the following Stipulated Compliance Order to fully resolve the matter and any requirement related to the same under all applicable laws and regulations:

1) Within 30 days of the effective date of this **SCO, RMP** shall pay the penalty in the amount of $13,000.00 and reimbursements of administrative costs in the amount of $2,385.00 for a total of $15,385.00 by check made payable to the State of Utah.

2) Within 30 days of the effective date of this **SCO, RMP** shall initiate an environmental assessment to determine the impacts of the coal ash on the Price River upstream and downstream from the site of the discharge. This assessment must be sufficient to demonstrate the full extent of impacts to the aquatic life, agricultural, and recreational beneficial uses described in R317-2-13.1(c) and to demonstrate effectiveness of restoration efforts for these uses, and shall include:

    - An evaluation of impacts to aquatic organisms; for example, changes in fish and macroinvertebrate population and composition as a result of the discharge, and long-term evaluation of fish tissue metal accumulation.
    - Monitoring of cleanup status to include a demonstration that substrate and aquatic populations return to pre-release conditions through the impacted segments.
    - Demonstrations that sediment conditions are not harmful to the public health.
    - Long-term monitoring to demonstrate irrigation and secondary water use is not impacted.

3) Nothing in this **SCO** shall constitute a waiver by **RMP** of any claims it may have against third parties for costs, damages or other relief associated with the release described above. Further, nothing in this **SCO** shall prohibit or limit in any way **RMP's** ability to seek contribution or cost recovery from third parties under Comprehensive Environmental Response, Compensation and Liability Act, Resource Conservation and Recovery Act, Clean Water Act, or other laws or regulations. **RMP** reserves all rights to any remedy not expressly prohibited by this **SCO**.

4) **RMP** shall supply to the **DIVISION** all requested information consistent with requirements of this **SCO**, the **ACT**, associated rules and permit requirements.

5) **RMP** shall perform the requirements of this **SCO** within the time frames set forth herein.

6) By executing this **SCO**, **RMP** make no admissions concerning the findings and denies liability for the findings made within. The **PARTIES** understand and agree that this **SCO** is being entered into in an effort to resolve any dispute between the **PARTIES** and avoid any further dispute, discussion or action concerning the matters related thereto

7) Disputes arising hereunder are subject to Utah Code Ann. §§ 19-5-112, 19-1-301 and 19-1-301.5, Rule 305-7 of the Utah Admin. Code, and other applicable law.

8) The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this **SCO** and to bind the party they represent to this **SCO**.

9) This **SCO** shall be effective the day upon which it has been executed by the **DIRECTOR**.

IT IS SO AGREED.

PacifiCorp dba Rocky Mountain Power

MM

By: _____ Date: Dec. 6, 2016

PacifiCorp dba Rocky Mountain Power

IT IS SO ORDERED.

_____ Date: _____

Walter L. Baker, P.E., Director
Utah Division of Water Quality