

STATEMENT OF BASIS

PERMITTEE: Four Corners Materials (A Division of Oldcastle SW Group, Inc.)

FACILITY: Bayfield Pit

PERMIT NO: CO-0034665

RESPONSIBLE OFFICIAL: Kyle M. High, General Manager

FACILITY CONTACTS: Matt Carnahan  
P.O. Box 1969  
Bayfield, CO 81122  
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PERMIT TYPE: Renewal permit, Minor Industrial Sand & Gravel/Concrete

Background Information

The renewal permit is for the wastewater treatment facility serving the Bayfield Pit and Plant located at 6699 County Road 521, Bayfield, CO, 81122, in La Plata County. The previous permit was issued as effective on July 1, 2006, and expired on June 30, 2011. The facility receives process wastewater and stormwater from a sand and gravel mining, crushing, and washing operation, and stormwater from an on-site redi-mix concrete production facility. The treatment facility consists of three settling ponds which vary in size with mining activities. One outfall exists from the facility. Outfall 001 is located immediately to the west of the settling pond for the gravel mining area and drains directly to the Los Pinos River. An additional outfall, Outfall 004, was located immediately to the west of the settling pond for the gravel wash area and drained to a wetland prior to being discharged directly to the Los Pinos River. This outfall is no longer discharging process water or stormwater from the facility and has been removed from the reissued permit. The facility is located within the external boundaries of the Southern Ute Indian Reservation.

On September 15, 2004, EPA conducted an inspection of the Bayfield Pit. On the date of the inspection, EPA inspectors observed a discharge of pollutants from the Outfall 001 at the Bayfield Operations to Los Pinos River. EPA inspectors also noted unauthorized dumping of solid wastes to the constructed ponds which discharge to Outfall 004. As a result of these findings, four additions were made in reissuing a permit for these discharges. These additions were made consistent with a compliance order issued by EPA to Gosney and Sons in 2005, which required the expanded monitoring to address an unauthorized discharge. These additions were as follows:

1. The monitoring requirements for Outfalls 001 and 004 were expanded to include monitoring of chemical oxygen demand (COD), alkalinity, aluminum, and metals,

to further characterize the effluent associated with unauthorized activities noted at the site during inspection;

2. An effluent limit for fecal coliforms (200/100mL) was added to the permit to be consistent with tribal water quality standards;
3. A narrative limit was added which disallows any additions of solid wastes which are not required for the mining and processing of sand and gravel or the production of redi-mix concrete; and
4. Section 2.4 of the permit was amended to note that monitoring results shall be reported to EPA on a quarterly basis as opposed to a semi-annual basis.

### Monitoring Data

Since the reissuance of this permit in 2007, there have been 14 Discharge Monitoring Reports submitted from the facility documenting discharge events from the facility. Data from these Discharge Monitoring Reports reflecting periods where the facility discharged are as follows:

<b>DMR Submittal</b>	<b>D.O.</b>	<b>pH (min)</b>	<b>pH (max)</b>	<b>TSS (30day)</b>	<b>TSS (7day)</b>	<b>AI</b>
Dec. 31, 2007	12.3	8	8.3	12.3	35	.37
Dec. 31, 2008	10.73	8.22	8.75	8.7	16	.15
June 30, 2009	8.36	8.21	8.68	13.2	13.2	.48
Sept. 30, 2009	9.65	8.21	8.68	9.8	12.4	.2
Dec. 31, 2009	8.23	8.29	8.4	3.4	NR (b/)	NR (b/)
Mar. 31, 2010	10.18	7.31	8.42	2	NR (b/)	<b>1.52</b>
June 30, 2010	10.88	7.11	8.21	7.33	7.5	.14
Sept. 30, 2010	9.05	7.2	7.7	5.5	5.5	.25
Dec. 31, 2010	12.55	7.1	8.2	2.8	2.8	.1
Mar. 30, 2011	14.35	7	8.1	2.5	2.5	.13
June 30, 2011	14.1	7.1	7.7	10.6	10.6	.436
Sept. 30, 2011	14.47	7	7.6	11.2	11.2	.5
Dec. 31, 2011	16.5	8.3	8.4	3.4	3.4	.096
Mar. 31 2012	16	7.2	8.2	4.9	4.9	.16
<b>Minimum</b>	8.23	7	n/a	n/a	n/a	n/a
<b>Maximum</b>	n/a	n/a	8.75	13.2	35	<b>1.52</b>
<b>Effluent Limit</b>	7.0 (a/)	6.5	9.0	30	45	<b>.75 (c/)</b>
<b>Exceedance?</b>	N	N	N	N	N	<b>YES</b>

a/ The previous permit contained requirements for monitoring dissolved oxygen to determine potential pollutant discharges but the permit did not contain an effluent limit for this parameter. The presumptive limit of 7.0 mg/L corresponds to Aquatic Life Cold 1 classification with a limit of 7.0 mg/L proposed for spawning fish populations.

b/ NR = Not Reported on DMR

c/ The previous permit contained requirements for monitoring aluminum to determine potential pollutant discharges but the permit did not contain an effluent limit for this parameter. The limit of 0.75 mg/L corresponds to the acute criteria expressed in EPA's National Recommended Water Quality Criteria and tribal standards and is expressed in terms of total recoverable metal in the water column.

### Receiving Waters

Discharges from Outfall 001, which is designated as the outlet of the settling pond serving the current mining area, are discharged directly to the Los Pinos River. The Southern Ute Indian Tribe adopted water quality standards for waters within the external boundaries of the Southern Ute Indian Reservation. These standards are in the process of being updated with revisions being approved by the Tribal Council before drafting a water quality standards program eligibility application for Reservation trust lands. Until these updated standards are approved by the Tribal Council and prior to obtaining program eligibility for water quality standards program eligibility on trust lands, EPA will evaluate the need for water quality based effluent limits using the existing tribal standards as a basis. The permittee will need to notify EPA if any additional outfalls will be necessary due to expansion of the mining operations.

The Southern Ute Indian Tribe has classified the Los Pinos River for the following beneficial uses: Aquatic Life Cold 1, Recreation 1, Water Supply, and Agriculture.

Water Quality Criteria for the segment include:

#### Physical and Biological:

D.O. = 6.0 mg/L, 7.0 mg/L spawning

pH = 6.5 – 9.0

Fecal Coliform = 200/ 100mL

Aluminum = 0.75 mg/L (acute) / 0.087 mg/L (chronic)

### Effluent Limitations

Limits for oil and grease and total suspended solids are being retained in this permit reissuance and are based on Best Professional Judgement (BPJ) using limits set by the previous permit (antibacksliding), which were based on typical sand and gravel operations in the state of Colorado.

The effluent limits from the 2006 permit for this facility remain the same in this permit with one

exception. An effluent limit for aluminum has been added to the permit based on data collected by the facility from the past 5 years. The previous permit contained requirements for monitoring aluminum to determine potential pollutant discharges, but the permit did not contain an effluent limit for this parameter. When comparing the effluent data to a limit of 0.75 mg/L, which corresponds to the acute criteria expressed in EPA's National Recommended Water Quality Criteria and standards set forth by the Southern Ute Tribe, it is noted that there was one discharge which exceeded this limit on March 31, 2010 with a value of 1.52 mg/L. Two other samples noted aluminum concentrations of 0.436 mg/L and 0.48 mg/L. Based on the exceedance of the acute water quality criteria, a limit of 0.75 mg/L for total recoverable aluminum has been added to the permit.

Effluent Characteristic	Effluent Limitation		
	30-Day Average <u>a</u> /	7-Day Average <u>a</u> /	Daily Maximum <u>a</u> /
Total Suspended Solids, mg/L	30	45	N/A
Oil and Grease, mg/L	N/A	N/A	10
Fecal Coliforms, no./100 mL	N/A	N/A	200
Aluminum (total recoverable), mg/L	N/A	N/A	0.75
The pH of the discharge shall not be less than 6.5 or greater than 9.0 at any time.			
There shall be no visible sheen from oil and grease in the receiving water or adjoining shoreline.			
There shall be no discharge of water which contacts solid or liquid wastes which are not required for the mining and processing of sand and gravel and the production of redi-mix concrete.			
There shall be no discharge of sanitary wastewaters from toilets or related facilities.			
No chemicals shall be added to the discharge unless prior written permission for the use of a specific chemical is granted by permit issuing authority. In granting such use, additional limitations and/or monitoring requirements may be imposed.			
There shall be no discharge of floating debris, scum or other surface materials in quantities sufficient to harm existing beneficial uses of the receiving water.			
Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to prevent any reasonable loss of the material from entering discharged waters or waters of the United States. Depending on the amount of oil stored, the permittee may need to prepare a Spill Prevention Control and Countermeasures Plan as required by 40CFR Part 112.			

The limits for pH and fecal coliforms are based on the Southern Ute's tribal water quality standards for the Los Pinos River. Other water quality based limits were not established due to the low flow of the facility compared with the flow of the receiving water.

#### Self-Monitoring Requirements

The self-monitoring requirements in the 2006 permit for this facility were as follows:

## 2006 PERMIT SELF-MONITORING REQUIREMENTS

Effluent Characteristic	Frequency	Sample Type <u>a/</u>
Total Flow, mgd <u>b/</u>	Weekly	Instantaneous
Dissolved Oxygen	Weekly	Instantaneous
Total Suspended Solids, mg/L	Monthly	Grab
Total Dissolved Solids, mg/L	Quarterly	Grab
Alkalinity	Quarterly	Grab
Chemical Oxygen Demand (COD)	Quarterly	Grab
Fecal Coliforms, no./100 mL	Monthly	Grab
pH, units	Weekly	Grab
Oil and grease, visual <u>c/</u>	Daily	Visual <u>c/</u>

a/ See Definitions, Part 1.1., for definition of terms.

b/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate (in million gallons per day) during the reporting period and the maximum flow rate observed (in mgd) shall be reported.

c/ A daily visual observation is required. If a visible sheen is detected, a grab sample shall be taken and analyzed immediately. The concentration of oil and grease shall not exceed 10 mg/L in any sample.

The reissued permit for this facility eliminates several of these self-monitoring requirements as they were required as part of compliance order issued by EPA in 2005. With the exception of the exceedance of EPA's water quality criteria for aluminum, pollutant concentrations in the discharge demonstrated from five years of data collected per the self-monitoring requirements in the 2006 permit reissuance did not represent a reasonable potential to exceed water quality standards. Therefore, the requirements to monitor for analytes for which there are not effluent limits in this permit have been removed from this reissued permit. This includes removing the requirement to monitor for dissolved oxygen, total dissolved solids, alkalinity, and chemical oxygen demand. The removal of these monitoring requirements is independent of the need to comply with EPA's 2005 compliance order, which may be closed independent of this permit action. The requirement to monitor for total suspended solids has been continued from the 2006 permit due to the Colorado River Basin Salinity Control Forum Policy. A numeric limit has not been applied to the facility for dissolved solids as self-monitoring data from the past five years indicate that the facility is discharging less than one ton of salts per day on an annual average, but quarterly monitoring of dissolved solids will be required to keep track of what is being discharged in accordance with the Forum's policy.

The self-monitoring requirements in this (2012) permit reissuance are as follows:

**2012 PERMIT SELF-MONITORING REQUIREMENTS**

Effluent Characteristic	Frequency	Sample Type <u>a/</u>
Total Flow, mgd <u>b/</u>	Weekly	Instantaneous
Total Suspended Solids, mg/L	Monthly	Grab
Total Dissolved Solids, mg/L	Quarterly	Grab
Aluminum	Quarterly	Grab
Fecal Coliforms, no./100 mL	Monthly	Grab
pH, units	Weekly	Grab
Oil and grease, visual <u>c/</u>	Daily	Visual <u>c/</u>

a/ See Definitions, Part 1.1., for definition of terms.

b/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate (in million gallons per day) during the reporting period and the maximum flow rate observed (in mgd) shall be reported.

c/ A daily visual observation is required. If a visible sheen is detected, a grab sample shall be taken and analyzed immediately. The concentration of oil and grease shall not exceed 10 mg/L in any sample.

Removal of Outfall 004 from the Self-Monitoring Requirements:

An additional outfall, Outfall 004, was located immediately to the west of the settling pond for the gravel wash area and drained to a wetland prior to being discharged directly to the Los Pinos River. This outfall is no longer discharging process water or stormwater from the facility. Therefore self-monitoring requirements for Outfall 004 and effluent limits for Outfall 004 have been removed from this permit.

Stormwater Requirements

The facility was required to develop and implement a stormwater pollution prevention plan as a condition of the previous permit. The renewal permit requires updating of the plan and a copy to be maintained current and on site at the facility. Requirements for monitoring, recordkeeping, and reporting of stormwater related discharge events have been included in the renewal permit.

Reporting Requirements

The facility will be required to report quarterly on a discharge monitoring report (DMR) for discharges from Outfall 001.

Endangered Species Act (ESA) Requirements

Section 7(a) of the Endangered Species Act requires federal agencies to insure that any actions authorized, funded, or carried out by an Agency are not likely to jeopardize the continued existence of any federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species.

The following table lists the federally-listed endangered, threatened, proposed and candidate species for La Plata County, Colorado.

<b>Federally-Listed Endangered, Threatened, Proposed and Candidate Species for La Plata County, CO</b>			
<b>Species</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Impact</b>
Black-footed Ferret	<i>Mustela nigripes</i>	E	NLAA
Canada Lynx	<i>Lynx Canadensis</i>	T	NLAA
North American Wolverine	<i>Gulo gulo luscus</i>	C	NLAA
Pagona Skyrocket	<i>Ipomopsis polyantha</i>	E	NLAA
Rio Grande Cutthroat Trout	<i>Oncorhynchus clarki virginalis</i>	C	NLAA
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E *	NLAA
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T	NLAA
New Mexico Meadow Jumping Mouse	<i>Zapus hudsonius luteus</i>	C	NLAA
Razorback Sucker	<i>Xyrauchen texanus</i>	E *	NLAA
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E	NLAA
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C	NLAA

\* Water Depletions in the Upper Colorado River and San Juan River Basins may affect the species and/or critical habitat in downstream reaches in other states.

Symbols/Acronyms:

- T Threatened
- E Endangered
- P Proposed
- C Candidate
- NLAA Not Likely to Adversely Affect
- LAA Likely to Adversely Affect

The determinations of impact to the species listed in the table are based on the following criteria:

1. Discharges in the pH range of 6.5-9.0 should not create a condition of acute toxicity restricting the migration of sensitive trout species.
2. The Colorado pikeminnow and the Razorback sucker are listed as endangered due to water depletions of the Upper Colorado River and San Juan River Basins. This permit does not contribute to water depletions of these basins.
3. It does not appear that a critical habitat designation exists in La Plata County for the listed species.

Correspondence was submitted to the U.S. Fish and Wildlife Service – Western Slope Field Office in Grand Junction, CO to gather concurrence with the determinations as part of the public notice period of the permit.

#### National Historic Preservation Act (NHPA) Requirements

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. The EPA has evaluated its planned issuance of the NPDES permit for the Bayfield Pit to assess this action's potential effects on any listed or eligible historic properties or cultural resources. The EPA does not anticipate any impacts on listed/eligible historic properties or cultural resources because this permit will not be associated with any new ground disturbance or significant changes to the volume or points of discharge.

#### Public Notice and Response to Comments

**INSERT DATE OF PUBLIC NOTICE AFTER PUBLIC NOTICE AND ANY APPLICABLE COMMENTS**

Permit and Fact Sheet drafted by Greg Davis.  
August 2, 2012  
Amended October 5, 2012