Stormwater Pollution Prevention Plan

for:

North Lemon Creek Material Source
Lemon Creek Valley
Juneau, Alaska

Under the NPDES 2008 Multi-Sector General Permit
for Stormwater Discharges Associated with Industrial Activities:

Permit No. AKR050000

SWPPP Contact(s):

City & Borough of Juneau
Material Source Manager
155 S. Seward Street
Juneau, Alaska  99801
Ph: 907-586-0481
Fax: 907-463-2606

SWPPP Preparation Date:

1/13/2009
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SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION 
(MSGP 5.1.1 and 5.1.2)

1.1 Facility Information

Facility Information
Name of Facility: North Lemon Creek Material Source
Street: Lemon Creek Valley (off the end off Anka Street)
City: Juneau State: AK ZIP Code: 99801
County or Similar Subdivision: City & Borough of Juneau
Permit Tracking Number: NA (if covered under a previous permit)
Latitude/Longitude:
Latitude: 58.3659 ° N (decimal) Longitude: -134.4838 ° W (decimal)
Method for determining latitude/longitude (check one):
☐ USGS topographic map (specify scale: ______________) ☐ EPA Web site ☐ GPS
☒ Other (please specify): Google Earth
Is the facility located in Indian Country? ☑ Yes ☐ No
If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." Not applicable
Is this facility considered a Federal Facility? ☐ Yes ☑ No
Estimated area of industrial activity at site exposed to stormwater At full development = 32.7 (acres)
Discharge Information
Does this facility discharge stormwater into an MS4? ☐ Yes ☑ No
If yes, name of MS4 operator: __________________________
Name(s) of water(s) that receive stormwater from your facility: Lemon Creek
Are any of your discharges directly into any segment of an "impaired" water? ☑ Yes ☐ No
If Yes, identify name of the impaired water (and segment, if applicable): Lemon Creek
Identify the pollutant(s) causing the impairment: Turbidity, Sediment
For pollutants identified, which do you have reason to believe will be present in your discharge?
Turbidity and sediment
For pollutants identified, which have a completed TMDL? Both are addressed in a completed TMDL.
There is no Wasteload Allocation in the TMDL. Restoring water quality is addressed through a phased
approach and incorporation of Control Actions. The applicable Control Actions in the TMDL are 4.b Stormwater Treatment, Measure 3 – Require treatment measures for all new conveyances; and 4.d Best Management Practices, Measure 2 – Implement BMPs through the CBJ development and building permits, and DEC Section 401 federal permit certification authority.

Do you discharge into a receiving water designated as a Tier 2 (or Tier 2.5) water?  
☐ Yes ☒ No

Are any of your stormwater discharges subject to effluent guidelines?  
☐ Yes ☒ No

If Yes, which guidelines apply?  
Primary SIC Code or 2-letter Activity Code: 1442 Construction Sand & Gravel (refer to Appendix D of the 2008 MSGP)

Identify your applicable sector and subsector: Sector J: Mineral Mining and Dressing

1.2 Contact Information/Responsible Parties

Facility Owner & Operator:
Name: City & Borough of Juneau  
Address: 155 S. Seward Street  
City, State, Zip Code: Juneau, AK 99801  
Telephone Number: 907-586-0800
Email address:  
Fax number:

SWPPP Contact:
Name: Alan Steffert  
Telephone number: 907-586-0481
Email address: Alan_Steffert@ci.juneau.ak.us  
Fax number: 907-463-2606

1.3 Stormwater Pollution Prevention Team

<table>
<thead>
<tr>
<th>Staff Position</th>
<th>Individual Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Source Manager</td>
<td>Development and oversight of material source activities for compliance, inspections and monitoring with regard to the MSGP</td>
</tr>
<tr>
<td>Engineering Associate</td>
<td>Inspections and monitoring assistance for the SWPPP &amp; MSGP</td>
</tr>
</tbody>
</table>

1.4 Activities at the Facility

Location: This facility is located in Lemon Creek, a suburb of Juneau, Alaska. The site is accessed via Glacier Highway, to Anka Drive, following it up Lemon Creek Valley to the bridge crossing Lemon Creek. The pit is located north of Lemon Creek Correctional Facility.
Operation and Control: The material source is owned by the City & Borough of Juneau (CBJ). It is operated by the Engineering Department. Use of the site is governed by the CBJ through Individual Mining Plans (IMPs), which are issued to each pit user and specify a unique area of the material source for their mining operations. The CBJ controls compliance with this SWPPP through the Individual Mining Plans and through a document signed by each user for each use of the facility. Submitting IMPs and signing the document are requirements for all project users. The letter confirms their knowledge and understanding of their responsibility to perform their mining operations in accordance with the requirements of this SWPPP. Copies of active IMPs and signed confirmation letter are maintained with the SWPPP (see Tab 4 – Active IMPs and Certification Letters).

Mining operation locations will vary continuously, including locations of stock piles, surge piles and screening operations, in accordance with the IMPs. All IMPs are made a part of this SWPPP while the IMP is active. Active IMPs are kept with the SWPPP and are part of the SWPPP as long as they are contained within the SWPPP binder (see Tab 4).

Activities at the Facility

Preparation of New Mining Areas:

**Equipment Involved:** excavators, loaders, haul trucks

**Activity:** Clearing, grubbing and overburden removal of the area being prepared for General Mining. **Location:** New mining operation locations vary on the site and are selected to utilize existing BMPs, minimize unnecessary development and to maximize existing travel routes and mining operations.

General Mining:

**Equipment Involved:** excavators, loaders, haul trucks

**Activity:** Excavating material with a loader and/or excavator, creating stockpiles and surge piles, screening material and loading haul trucks

**Location:** Mining operation locations vary on the site. Locations are designated on the IMPs, which are part of the SWPPP as long as the IMP is active.

Screening:

**Equipment Involved:** loaders, excavators, and haul trucks

**Activity:** Handling material from a stockpile or in situ location into a screen; stockpiling / loading screened material; developing a stockpile of screened material.

**Location:** Screening locations vary on the site. Locations are designated by the mining area specified on the IMPs, which are part of the SWPPP as long as the IMP is active.

Maintenance & Fueling:

**Equipment Involved:** excavators, loaders, haul trucks, screens, fuel trucks, mechanic's shop truck

**Activity:** Minor maintenance, lubrication and fueling

**Location:** Maintenance and fueling will be performed at varying locations throughout the site. Portable Spill Containment devices are being employed for spill prevention and will be used at each fueling or maintenance event.

Drainage Maintenance:

**Equipment Involved:** excavators, loaders, haul trucks, grader

**Activity:** Digging ditches, constructing settling ponds, cleaning settling pond / sump, grading / contouring the site with loader / dozer, hauling waste material and overburden from the site, cleaning / repairing erosion controls.

**Location:** At each stormwater control measure shown on the Site Map.
Restoration / Contour Grading:

**Equipment Involved:** excavators, loaders, dozers, haul trucks, graders, hydro seed sprayer

**Activity:** Shaping the site for final restoration, vegetating, topsoiling, hydroseeding / mulch

**Location:** Progressively throughout the site.

### 1.5 General Location Map

See “Tab 1 - MAPS” tab in this SWPPP binder.

### 1.6 Site Map

See “Tab 1 - MAPS” tab in this SWPPP binder.

## SECTION 2: POTENTIAL POLLUTANT SOURCES (MSGP 5.1.3)

### 2.1 Industrial Activity and Associated Pollutants

<table>
<thead>
<tr>
<th>Industrial Activity</th>
<th>Pollutant Source(s)</th>
<th>Associated Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of New Mining Areas</td>
<td>Road Construction</td>
<td>Woody debris, suspended solids (TSS), turbidity</td>
</tr>
<tr>
<td></td>
<td>Removal of Overburden</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Removal of waste material to expose usable soils.</td>
<td></td>
</tr>
<tr>
<td>General Mining</td>
<td>Raw material stockpiles</td>
<td>Dust, TSS, dissolved solids (TDS), turbidity</td>
</tr>
<tr>
<td></td>
<td>Material handling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Screening operations</td>
<td></td>
</tr>
<tr>
<td>Equipment &amp; Vehicle Maintenance</td>
<td>Fueling</td>
<td>Diesel (petroleum distillate, naphthalene), gas, oil</td>
</tr>
<tr>
<td></td>
<td>Waste product disposal</td>
<td>Oil, solvents, heavy metals (copper, lead, zinc), acid / alkaline wastes</td>
</tr>
<tr>
<td></td>
<td>Fluid replacement: hydraulic / oil / transmission / radiator fluids and grease</td>
<td>Ethylene glycol, oil, lead, arsenic, cadmium, chromium, benzene, TCA, TCE, PAHs, cleaning solvents (xylene).</td>
</tr>
<tr>
<td>Drainage &amp; BMP Maintenance</td>
<td>Settling pond upset</td>
<td>Dust, TSS, turbidity</td>
</tr>
<tr>
<td></td>
<td>Sediment removal at collection features</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Swale / ditch construction</td>
<td></td>
</tr>
<tr>
<td>Restoration / Contour Grading</td>
<td>Site grading</td>
<td>Dust, TSS, turbidity, phosphorus, nitrogen</td>
</tr>
<tr>
<td></td>
<td>Fertilizers</td>
<td></td>
</tr>
</tbody>
</table>
2.2 **Spills and Leaks**

**Areas of Site Where Potential Spills/Leaks Could Occur**

<table>
<thead>
<tr>
<th>Location</th>
<th>Outfalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance &amp; Refueling Locations (see 1.4) – see 2.1 above for pollutants</td>
<td>Outfall No. 1</td>
</tr>
</tbody>
</table>

**Description of Past Spills/Leaks**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Outfalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>None</td>
<td>NA</td>
</tr>
</tbody>
</table>

2.3 **Non-Stormwater Discharges Documentation**

*Date of evaluation:* September 29, 2009

*Description of the evaluation criteria used:* Visual inspection of discharge with pictures taken. There are no buildings or other materials stored on site to produce non-storm water discharges.

*List of the outfalls or onsite drainage points that were directly observed during the evaluation:* Settling Pond Outlet, titled Outfall No. 1

*Different types of non-stormwater discharge(s) and source locations:* There are no non-stormwater discharges from the site.

*Action(s) taken:* None

2.4 **Salt Storage**

There are no salt storage piles on site.

2.5 **Sampling Data Summary**

There are no previous water samples for this site. All previous monitoring has been via visual inspections.

**SECTION 3: STORMWATER CONTROL MEASURES (MSGP 5.1.4 and 2.1.2)**

3.1 **Minimize Exposure**

The following BMPs are used to minimize exposure of activities to uncontaminated flows:
Phasing

**BMP Description:** The gravel pit development is planned for 3 phases, with each phase being demarcated by the construction of an additional settling pond (see MAPS tab, Master Phasing Plan). Phasing will minimize exposure of soils to erosion because additional settling pond construction and maintenance will be required as the area of exposed soils increases. Phasing will also establish points at which site reclamation can be formally evaluated to see if sections of the gravel pit can be reclaimed and closed off to traffic.

Limited Surface Disturbance

**BMP Description:** The amount of exposed soils will be limited to that required for ongoing mining operations. Tree clearing and vegetative matt and overburden removal will occur as estimated gravel pit use requirements dictate.

Temporary Swale (BMP 40)

**BMP Description:** A temporary swale is an excavated drainage way designed to prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet. This minimizes exposure of soils to potentially eroding storm water conditions. Temporary Swales are located as shown on the current Site Map.

3.2 **Good Housekeeping**

The following measures will be incorporated as Good Housekeeping BMPs. These measures will be inspected for during regular inspections and will be promulgated through the User Certification Statement that all users must sign before being granted use of the gravel pit by the CBJ.

1. All utilized absorbent pads will be disposed of off site by the pit users at an approved location.
2. Spill cleanup products will be kept in the mobile service vehicle and in the shed by the weigh station, located as shown on the Site Map.
3. No tanks, drums or other containers containing pollutants will be stored on site.
4. All used servicing containers or products will be disposed of at an approved off-site location by the material source users.
5. Fuel fill hoses will have spill and overflow protection features.
6. Topping off of fuel tanks will be discouraged.
7. Areas of the pit that begin pumping subsurface moisture will be closed to mining operations until the area drains and stabilizes.
8. The facility gates will be closed and locked at the end of each day of operation to prevent unauthorized use or activities within the site.

3.3 **Maintenance**

The following will be incorporated as Maintenance BMPs. These measures will be inspected for during regular inspections and will be promulgated through the User Certification Statement that all users must sign before being granted use of the gravel pit by the CBJ.
Mining Equipment:

1. Major maintenance and repair of equipment will be performed regularly at offsite user obtained maintenance facilities that are approved for such activities.
2. On-site equipment maintenance will be limited to re-fueling and minor servicing activities by user personnel, except when further repairs are required due to vehicle breakdown. These activities will be performed with Pollutant Spill Containment (PSC) devices (BMP 51) at all locations.
3. Users will be required to have their operators inspect their equipment for leaks. Leaks will be reported to maintenance personnel.
4. CBJ personnel will inspect equipment and the site for signs of leaks during each routine inspection.

Control Measures:

1. In the spring (March / April), the following maintenance steps will be taken prior to beginning the active mining season:
   a. All sediment trapping devices will be cleaned.
   b. An overall inspection of the site will be performed to identify new problem areas and to repair any existing BMPs.
2. All BMPs will be inspected in accordance with SWPPP Section 5: Inspections.
3. During active mining operations:
   a. All sediment trapping devices will be cleaned when sediment has accumulated to 50% of total storage capacity.
   b. All BMPs will be watched for damage or failure to properly function between Routine Site Inspections. Repairs will be made in accordance with the MSGP.
4. All waste soils produced by cleaning and maintenance will be hauled to the Overburden and Waste Soil Stockpile Area within the facility limits.

3.4 Spill Prevention and Response

Activity: Maintenance and Fueling of Mining Equipment

Pollutants – Oil, fuel, grease, other equipment service products (see 2.1, Maintenance and Fueling)

Structural Controls – The control measure implemented for this activity is BMP 51, Portable Spill Containment (PSC) devices. These include the Portable Spill Containment Berm and the Portable Fuel Spill Containment Pop Up Pool. This BMP will be used to collect and contain any pollutants. Pollutants will be removed from the PSCs with absorbent pads, which will be removed from the site and disposed of by the gravel pit users. This control measure is identified on the Site Map with Note 2, as the location will vary continually. All mining equipment will be serviced and/or fueled using these devices. PSCs will be stored in the Weight Station Shed (see Site Map) or in the mobile service vehicles. No new or used pollutants will be stored at the site.

Spill Response Procedures – See the “SPILL RESPONSE” tab of the SWPPP Binder.

Spill Prevention and Response Training – See SWPPP Section 3.9: Employee Training.
Responsible Personnel – The CBJ Material Source Manager is responsible to make sure spill kits are complete and ready for use and that other pit users are training regarding spill prevention and response.

3.5 Erosion and Sediment Controls

Erosion Controls: (See “SELECTED BMPs” tab for additional function and installation details pertaining to each BMP.)

<table>
<thead>
<tr>
<th>Staging Areas – Grading Areas (BMP 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> Grade work areas so that storm water runoff is directed away from active construction activity. The slope of the grade allows the runoff to flow, but maintains slow runoff velocities and ensures that all runoff is routed through the sediment trapping measures employed on the site. Staging and work areas will also be graded at 5% or less to minimize runoff velocities and thereby erosion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stabilized Construction Entrance / Exit (BMP 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> The last 300 feet of the haul road when exiting the gravel pit is capped with shot rock. This BMP functions as an erosion control device by capping the haul road with a non-erodable surface.</td>
</tr>
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<table>
<thead>
<tr>
<th>Erosion Prevention on Temporary Roads (BMP 6)</th>
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</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> Haul roads are sloped away from the disturbed portions of the site to prevent introduction of more storm water into the disturbed portion of the site and to divert water from collecting on the roadway. Rolling dips are incorporated into the roadway on inclines to prevent runoff from running down the roadway and creating gullies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stockpile Management (BMP 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> – A diversion berm, swale or ditch will be constructed on the downhill side of any stockpiles, surge piles or screening operations between such activities and haul routes, or on the uphill side as required to prevent run-on. This control will direct runoff from such activities towards a primary conveyance feature within the site. Users will establish their operations to achieve this BMP. Stockpiles of overburden will be seeded once placed within the Waste Soil Staging Area.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Topsoiling (BMP 20)</th>
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<tbody>
<tr>
<td><strong>BMP Description:</strong> – Topsoil will be applied to the finished slope or other disturbed areas when required in order to provide a soil base that will establish vegetation. This BMP is only to be used in conjunction with Seeding (BMP 21).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Seeding (BMP 21)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> – All final slopes or disturbed areas that are at final grade will be seeded within 14 days of completion and will be maintained or replenished as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outlet Protection (BMP 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMP Description:</strong> Outlet protection consists of shot or crushed rock placed at outfalls to slow discharge velocities which protect against erosion and helps remove sediment. Outlet protection is installed at the outlets of culverts or</td>
</tr>
</tbody>
</table>

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drainage routes, as shown on the Site Map.

Temporary Swale (BMP 40)
BMP Description: A temporary swale is an excavated drainage way designed to prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet. Temporary Swales are located as shown on the current Site Map.

Outlet Protection (BMP 30)
BMP Description: Outlet protection consists of shot or crushed rock placed at outfalls to slow discharge velocities which protect against erosion and helps remove sediment. Outlet protection is installed at the outlets of culverts or drainage routes, as shown on the Site Map.

Sediment Controls: (See “SELECTED BMPs” tab for additional function and installation details pertaining to each BMP.)

Stabilized Construction Entrance / Exit (BMP 5)
BMP Description: This BMP functions as a temporary sediment removal device consisting of a crushed rock or stone pad. It will be installed as a cap on the last 300 feet of the haul road at the exit from the construction site. This BMP limits sediment tracking from vehicles and equipment leaving the construction site onto public rights-of-way and streets.

Check Dams (BMP 32)
BMP Description: Check dams will be installed at locations as shown on the Site Map. Check dams are small dams constructed in open channels, swales, or drainage ways. Check dams may be temporary or permanent barriers made of logs and brush, stone, or other materials. Check dams are used to reduce or prevent excessive bank and bottom erosion by reducing the gradient or runoff velocity.

Silt Fence (BMP 36)
BMP Description: Silt Fence will be installed at the locations indicated on the Site Map. Silt fences assist in sediment control by retaining some of the eroded soil particles and slowing the runoff velocity to allow particle settling. They also demarcate and protect naturally vegetated areas down slope of disturbed areas by intercepting sediment.

Vegetated Buffer Strip (BMP 37)
BMP Description: – The entire site is vegetated with spuce, alder, underbrush and a vegetative matt. Diversion swales and culverts will discharge into these areas (see Site Map) to treat the runoff and trap sediment. The vegetative buffer area is defined by the clearing limits. A vegetative buffer strip is a gently sloping area of vegetative cover that runoff water flows through before entering a stream or other conveyance. Vegetative buffer strips act as
living sediment filters that intercept and detain stormwater runoff. They reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in the runoff water.

Sedimentation Basin (BMP 38)
BMP Description: A sedimentation basin has been constructed for the first phase of the gravel pit development and is shown on the Site Map. Additional sediment basins are designed to be added in each subsequent phase of the gravel pit development.

### 3.6 Management of Runoff

Stormwater Management BMPs, located as shown on the Site Map:

Topsoiling (BMP 20) and Seeding (BMP 21)
BMP Description: Topsoil and seeding all finalized pit areas will reduce runoff by establishing vegetation that slows runoff velocities and enhances infiltration.

Check Dams (BMP 32)
BMP Description: Check dams will be installed at locations as shown on the Site Map. For runoff management, check dams will service to slow and detain runoff.

Vegetated Buffer Strip (BMP 37)
BMP Description: Natural vegetated buffer strips are utilized at this facility for sediment removal and infiltration.

Sedimentation Basin (BMP 38)
BMP Description: A sedimentation basin has been constructed for the first phase of the gravel pit development and is shown on the Site Map. The sedimentation basin incorporates both a buffer storage volume and infiltration through the gravel soils. Additional sediment basins are designed to be added in each subsequent phase of the gravel pit development.

Temporary Swale (BMP 40)
BMP Description: A temporary swale is an excavated drainage way. They prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet.

### 3.7 Salt Storage Piles or Piles Containing Salt

Not applicable.
3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

Refer to Part 8, Subpart J of the MSGP for the following permit requirements.

Technology Based Effluent Limits for Clearing, Grading and Excavation Activities. Refer to sub-section 8.J.4.


The requirements of this section are addressed utilizing the measures described in SWPPP Section 3: Stormwater Control Measures. The sediment basin was designed for the entire first phase of gravel pit development and as such is sufficient in size for clearing, grading and excavation activities.

8.J.4.2 Inspection of Clearing, Grading and Excavation Activities

**Frequency:** Inspections will be performed every 14 calendar days and within 24 hours of a single storm event of ½” or greater. The frequency may be altered for stabilized or winter conditions as described in 8.J.4.2.1.

**Locations:** All areas of the site disturbed by construction activities will be included in the inspection, including waste material storage areas and the outfall.

**Reports:** Inspection reports will be completed for each inspection, according to the requirements of MGSP Part 4.1 at a minimum. All reports will be kept in the SWPPP Binder.

8.J.4.3 Requirements for Cessation of Clearing, Grubbing and Excavation Activities

Inspections and maintenance must continue until final stabilization or commencement of active mining and temporary stabilization is complete. Temporary or final stabilization will be completed in accordance with 8.J.4.3.2 or 8.J.4.3.3, respectively.

Additional Technology-Based Effluent Limits: Refer to sub-section 8.J.5.

1. Employee Training – see Section 3.9 of this SWPPP
2. Stormwater Controls – see Sections 3.2 through 3.6 of this SWPPP
4. Treatment – see Section 3.7, Sediment Controls, item 7 (Sedimentation Basin).
5. Certification of Discharge Testing – not required (no mine dewatering activities on site)

Additional SWPPP Requirements: Refer to Section 8.J.6.

1. Nature of Industrial Activities – see SWPPP Sections 1.4, 1.5 and 2.1.
2. Site Map – see Section 1.6 of this SWPPP.

3. Potential Pollutant Sources – see Sections 2.1 and 2.2 of this SWPPP. There is no rock mining at this site to produce acid rock drainage. There will be minor rock blasting for removal of rock in conflict with the sand and gravel extraction operations.

4. Stormwater Controls – see Sections 3.1 through 3.6 of this SWPPP.

5. Employee Training – see Section 3.9 of this SWPPP.

6. Certification of Permit Coverage for Commingled Non-Stormwater Discharges – There are no non-stormwater discharges from this site. See Section 2.3.

Additional Inspection Requirements: Refer to Section 8.J.7.

See Sections 4 and 5 of this SWPPP for inspection and monitoring provisions. This sections modifies the quarterly routine inspection frequency to monthly due to Lemon Creek being an impaired receiving water body for sediment.

Sector-Specific Benchmarks: Refer to Section 8.J.8.

According to Table 8.J-1, this facility is a Subsector J1, Sand and Gravel Mining (SIC 1442). The Benchmark monitoring requirements are as follows:

1. Nitrate plus Nitrite Nitrogen: 0.67 mg/L
2. Total Suspended Solids (TSS): 100 mg/L

See also SWPPP Section 4.

Inactive and Unstaffed Sites – Conditional Exemption regarding inspections, assessments and monitoring: Refer to Section 8.J.8.1:

This conditional exemption will be utilized each winter during gravel pit shut down. Shut down typically begins in November and ends in March.

Effluent Limitations Based on Effluent Limitations Guidelines: Refer to Section 8.J.9

There are no mine dewatering discharges at this.

3.9 Employee Training

Employee training will occur in the following manner:

Person Responsible for Training: CBJ Material Source Manager.

Location:
a) In office: SWPPP team members will read or review the SWPPP documents, including the MSGP.
b) In field at the facility: the SWPPP team will make site visits. The content of the field training is detailed below.

Content:
a) Office Training:
   - New team members will read the entire SWPPP and MSGP document; existing team members will review these documents each year
   - Review the comprehensive site inspection annual report, noting any changes made to the SWPPP or Site Map.
   - Review inspection and monitoring requirements and procedures
   - Develop or review plans for performing inspections, monitoring and sampling
   - Review erosion and sediment control concepts
   - Review Good Housekeeping and Maintenance requirements (3.2 and 3.3)
   - Review spill response procedures (3.4)

b) Field Training at Facility:
   - Review erosion and sediment control concepts
   - Review Good Housekeeping and Maintenance requirements (3.2 and 3.3)
   - Review spill response procedures (3.4)
   - Inspect all control measures of the SWPPP (3.5 – 3.8).
   - Discuss maintenance evaluation methods and criteria.
   - Discuss control measure performance
   - Material Source Manager will train and meet with pit users as necessary.

Frequency:
a) One “In Office” and one “In Field” training will occur annually in the spring prior to the commencement of operations in the material source.
b) New team members will be trained when they are added to the team.
c) Storm water pollution prevention courses will be taken by team members as ongoing training

3.10 Non-Stormwater Discharges

There are no non-stormwater discharges at this facility, as documented in Section 2.3 of this SWPPP. The only potential non-stormwater discharge would be from fueling and maintenance activities. This potential discharge is addressed through the use of BMP 51, Portable Spill Containment devices (see Section 3.4).

3.11 Waste, Garbage and Floatable Debris

Debris will be generated by the general maintenance activities required on the Mining Equipment. Debris could also result from damaged Silt Fencing. Any waste from maintenance and servicing of mining equipment will be removed by the service personnel. Users of the facility will be notified to pick up and dispose of any such items. Members of the SWPPP Team will remove waste, garbage and floatable debris items found at the facility.
3.12 Dust Generation and Vehicle Tracking of Industrial Materials

Dust Generation – During extended periods of dry weather, dust can be generated on haul roads, at mining operations and at screening operations. The following measures are incorporated to minimize Dust Generation:

- Material source users are required to water haul routes and other related dust generating operations under the conditions specified in the material source Conditional Use permit. This condition is mandated for any user of the material source.
- Vegetative cover will be established in all area where mining operations are complete to minimize wind generated dust.
- Tall spruce trees will be maintained around the site and will act as wind breaks to minimize wind borne dust.

Vehicle Tracking – The exit haul route is capped with crushed rock. This will help remove material from haul vehicles before they enter the public traveled way. Roadway cleaning is required for all contractors using the site as well.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

The following table summarizes the Benchmark Monitoring required for this facility. This monitoring schedule can be modified by the EPA or ADEC in accordance with MSGP Part 6.2 due to Lemon Creek being an impaired water body has been modified by ADEC to include monitoring for Turbidity as noted below. Monitoring may be terminated when the requirements of the MSGP Section 6.2.1.2 (eg – not exceedence) and / or the letter from ADEC are met.

<table>
<thead>
<tr>
<th>Sample Location</th>
<th>Schedule</th>
<th>Pollutant</th>
<th>Numeric Limit</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outfall 1</td>
<td>4 / year: see MSGP 6.1.6, 6.1.7, 6.2.1.2 and schedule modification below.</td>
<td>Nitrate plus Nitrite Nitrogen</td>
<td>0.67 mg/L</td>
<td>One grab sample from a measurable storm event (see MSGP 6.1). Collected by the Material Source Manager, or appointed personnel. Sample to be delivered to Analytica Group Environmental Labs (780-6668). Sample collection and handling will be in accordance with instructions from Analytica.</td>
</tr>
<tr>
<td>Lemon Crk at &amp; upstream of Outfall 1</td>
<td>1 / mo during open water season (typically April 1 – Nov 30)</td>
<td>Turbidity</td>
<td>Refer to 18 AAC 70 70.020(b)(12)</td>
<td>Grab (1) sample at the two locations noted in accordance with std analytical methods and deliver to Analytica Group Environmental Labs (780-6668). Record the results on an MDMR form and keep with the SWPPP. Report any exceedance to ADEC as prescribed in the TMDL conformance response letter from William Ashton (dated 2/12/2010).</td>
</tr>
<tr>
<td>Outfall 1</td>
<td>Same as above</td>
<td>TSS</td>
<td>100 mg/L</td>
<td>Same as above.</td>
</tr>
</tbody>
</table>
Winter / Freezing Weather and Unstaffed / Inactive Schedule Modification (MSGP 6.1.6 and 8.J.8.1):

In accordance with the noted sections of the MSGP, the facility will not perform Benchmark Monitoring during Winter Shutdown, which is November 30 – March 31, due to freezing weather conditions (MSGP 6.1.6) and unstaffed / inactive site (MSGP 8.J.8.1). The modified schedule in which samples will be collected is as follows:

- April 1 – May 31
- June 1 – July 31
- August 1 - September 30
- October 1 – November 30

SECTION 5: INSPECTIONS

Inspectors will review SWPPP Sections 4.1 - 4.3 and referenced sections of the MSGP prior to performing inspections.

During Construction Activities: Inspections to be performed every 14 days or following a ½” rain event. See SWPPP Section 3.8, subsection 8.J.4.2.

During Mining Activities:

Routine Facility Inspections (MSGP 4.1)

- **Positions of the person(s), responsible for inspection:** Material Source Manager, Engineering Associate, or a contractor with appropriate SWPPP inspection certification and/or training.

- **Schedule (modified for inactive / unstaffed site):**
  - April 1 – October 31: Monthly
  - **Note:** All inspections will be completed during operational hours and at least one inspection will be made when a discharge is occurring.

- **Locations to be inspected and issues to watch for:** See the Routine Facility Inspection Form in the Inspection and Monitoring Reports tab of the SWPPP Binder.

Quarterly Visual Assessments (MSGP 4.2)

- **Positions of the persons responsible for inspection:** Material Source Manager; Engineering Associate, or a contractor with appropriate SWPPP training or certification.

- **Schedule:** In accordance with MSGP Parts 4.2.3 and 8.J.8.1, the Visual Assessment inspections will be reduced to 3 with the 4th quarter being exempt for an inactive and unstaffed site.

  - March 1 – May 31
  - June 1 – August 31
  - September 1 - November 30
Assessment Location: Outfall No. 1 as shown on the Site Map.

Comprehensive Site Inspections (MSGP 4.3)

- Positions of the person(s) responsible for inspection: Material Source Manager or Engineering Assistant
- Schedule: Annually in September or October.
- Areas to be inspected: All areas of the facility as delineated on the Annual Comprehensive Site Inspection form.

SECTION 6: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

6.1 Documentation Regarding Endangered Species.

Based on a review of range for listed endangered and threatened species in Alaska and consultation with National Marine Fisheries personnel, this project meets Criterion A regarding no impact to Endangered Species. See “Correspondence and Other Documentation” tab for documentation.

6.2 Documentation Regarding Historic Properties

Based on correspondence with Alaska SHPO and the Juneau Historic Resources Advisory Committee, this project meets Criterion B eligibility. See “Correspondence and Other Documentation” tab for documentation.

6.3 Documentation Regarding NEPA Review

Not applicable.

SECTION 7: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: ___________________________ Title: ______________________

Signature: ___________________________ Date: ____________________

SECTION 8: SWPPP MODIFICATIONS
See the “LOG” tab of the SWPPP binder.