Fact Sheet

The United States Environmental Protection Agency (EPA)
Plans To Issue A National Pollutant Discharge Elimination System (NPDES) General Permit To:

Small Suction Dredge Miners in Idaho

Technical Contact

Name: Cindi Godsey
Phone: (907) 271-6561
Email: godsey.cindi@epa.gov

EPA Proposes NPDES Permit Issuance

EPA proposes to issue a National Pollutant Discharge Elimination System (NPDES) General Permit to placer mining operations in Idaho for small suction dredges (intake nozzle size of 5 inches in diameter or less and with equipment rated at 15 horsepower or less). The draft permit sets conditions on the discharge - or release - of pollutants from these operations into waters of the United States.

This Fact Sheet includes:

- Information on public comment, public hearings, and appeal procedures
- a description of the industry
- a description of draft permit conditions
- background information supporting the conditions in the draft general permit

The State of Idaho Clean Water Act (CWA) § 401 Certification

EPA has requested that the Idaho Department of Environmental Quality (IDEQ) certify the NPDES permit for this operation under CWA § 401.

Persons wishing to comment on State Certification should submit written comments by the public notice expiration date to Johnna Sandow, Idaho Department of Environmental Quality, 1410 N. Hilton Boise, Idaho 83706. Ms. Sandow may be reached by phone at (208) 373-0163 or by e-mail at johnna.sandow@deq.idaho.gov.

EPA invites comments on the draft permit

EPA will consider all substantive comments before issuing a final permit. Those wishing to comment on the draft permit or request a public hearing may do so in writing by the public notice expiration date. Please submit comments to the Director, Office of Water and Watersheds, USEPA-Region 10, 1200 Sixth Avenue, Suite 900, OWW-130, Seattle, Washington 98101. Comments may be submitted by e-mail to godsey.cindi@epa.gov or faxed to (206) 553-0165.

All comments should include name, address, phone number, a concise statement of basis for the comment and relevant facts upon which it is based. A request for public hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. EPA has scheduled four information workshops in the locations below. Persons wishing to learn about the NPDES permit process, the conditions of this GP, and for an opportunity to provide written comments are encourage to attend one of these workshops.

The workshops are as follows:

City	Location	Date & Time
Grangeville	NezPerce National Forest 104 Airport Road (park in front)	Monday, February 22 4 pm to 7 pm (PST)
Boise	IDEQ Conference Room C 1410 N. Hilton	Tuesday, February 23 2 pm – 5 pm
Salmon	Salmon-Challis National Forest 1206 S. Challis Street	Wednesday, February 24 4 pm – 7 pm
Idaho Falls	ID Department of Fish & Game 4279 Commerce Circle	Thursday, February 25 3 pm – 6 pm

Documents are available for review

The draft NPDES permit and fact sheet can be reviewed at EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday. This material is also available for inspection and copying at the following locations in Idaho:

EPA Idaho Operations Office
1435 North Orchard Street
Boise, Idaho 83706
(208) 378-5746

Idaho Department of Environmental Quality
State Office
1410 North Hilton
Boise, Idaho 83706
(208) 373-0502

Idaho Department of Environmental Quality
Twin Falls Regional Office
1363 Fillmore Street
Twin Falls, Idaho 83301
(208) 736-2190 (800) 270-1663

Idaho Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, Idaho 83706
(208) 373-0550 (888) 800-3480

Idaho Department of Environmental Quality
Lewiston Regional Office
1118 F Street
Lewiston, Idaho 83501
(208) 799-4370 (877) 541-3304

Idaho Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, #300
Pocatello, Idaho 83201
(208) 236-6160 (888) 655-6160

Idaho Department of Environmental Quality
Idaho Falls Regional Office
900 N. Skyline Suite B
Idaho Falls, Idaho 83402
(208) 528-2650 (800) 232-4635

Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Pkwy
Coeur d'Alene, Idaho 83814
(208) 769-1422 (877) 370-0017

Copies of the draft permit and fact sheet can be found on the EPA, Region 10 website at http://www.epa.gov/r10earth/waterpermits.htm (click on 'Current public comment opportunities').

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LIST OF ACRONYMS

AR	Annual Report
BE	Biological Evaluation
BLM	Bureau of Land Management
BMP	Best Management Practices
CFR	Code of Federal Regulations
CSU	Conservation System Unit
CWA	Clean Water Act
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
GP	General Permit
IDEQ	Idaho Department of Environmental Quality
IDWR	Idaho Department of Water Resources
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
SPCC	Spill Prevention Control and Countermeasure
T&E	Threatened and Endangered
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
WQS	Water Quality Standard

I. BACKGROUND ON GENERAL PERMITS

Section 301(a) of the Clean Water Act (CWA) prohibits most point source discharges of pollutants to waters of the U.S. unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits authorize the discharge under certain conditions described in the permit. Such permits are usually issued to individual dischargers, i.e., an individual discharger receives its own individual permit. However, the NPDES regulations also authorize the issuance of "general permits" to categories of discharges. Issuance of a general permit allows EPA to authorize discharges from a number of dischargers at one time.

EPA's implementing regulations that authorize the issuance of general NPDES permits are under Title 40 of the Code of Federal Regulations (CFR), Part 122, Section 28 (40 CFR 122.28). EPA may issue a general NPDES permit if there are a number of point sources operating in a geographic area that: 1) involve the same or substantially similar types of operations; 2) discharge the same types of wastes; 3) require the same effluent limitations or operating conditions; 4) require the same or similar monitoring requirements; and 5) in the opinion of the Director, are more appropriately controlled under a general permit than under individual NPDES permits.

EPA Region 10 has determined that issuance of a general permit to authorize discharges from small suction dredge miners in Idaho is appropriate due to the similarity of operations, pollutants discharged, management practices, and need for similar limitations and monitoring requirements.

II. OPERATIONS AND RECEIVING WATERS COVERED BY THIS GENERAL PERMIT (GP)

A. Industry Description

Placer mining involves the mining and extraction of gold or other heavy metals and minerals primarily from alluvial deposits. These deposits may be in existing stream beds or ancient, often buried, stream deposits, i.e., paleo or fossil placers.

Many placer deposits consist of unconsolidated clay, sand, gravel, cobble and boulders that contain very small amounts of native gold or other precious metals. Most are stream deposits that occur along present stream valleys or on benches or terraces above existing streams. Areas for locating gold are around boulders near the upstream end of pools where the current first starts to slow, in seams and pickets in exposed bedrock around midstream boulders, or on the inside of a river bend at or near the head of a gravel bar where larger materials have accumulated.

Dredging systems are classified as hydraulic or mechanical (including bucket dredging), depending on the methods of digging. Suction dredges, the most common hydraulic dredging system, are popular with small and recreational gold placer miners. Suction dredges consist of a supporting hull with a mining control system, excavating and lifting mechanism, gold recovery circuit, and waste disposal system. All floating dredges are designed to work as a unit to dig, classify, beneficiate ores and dispose of waste. Because suction dredges work the

stream bed rather than stream banks, the discharges from suction dredges consist of stream water and bed material.

The primary pollutant of concern in the discharges from a suction dredge is suspended solids. The suspended solids in the effluent discharged from suction dredge outlets result from the agitation of stream water and stream bed material in the dredge. The discharged suspended solids result in a turbidity plume, or cloudiness, in the receiving water.

Mercury may be encountered and collected from historic activities. The discharge of mercury is prohibited under this GP.

B. Operations Covered by the GP

EPA is proposing to issue a GP that would authorize discharges from placer mining by small suction dredges (defined as having intake nozzle diameters of less than or equal to 5 inches and a rating of 15 HP or less). This is the first issuance of a GP for placer mining activities in Idaho.

Suction dredges with nozzle intakes larger than 5 inches and mechanical dredge activities are not authorized to discharge under this permit. Operations not covered by this GP need to submit an individual permit application to EPA. EPA will evaluate the possible need for other general permits.

Placer mining activities are also permitted by the Idaho Department of Water Resources (IDWR). IDWR permits for Recreational Dredging to suction dredges with nozzle size of 5 inches in diameter or less, and equipment rated at 15 horsepower or less.

Many of the permit conditions in the GP are based on conditions of the IDWR permit and are consistent with IDAPA 37.03.07.07 Rule 64 Stream Channel Alterations Rules applicable to recreational dredging. Other permit requirements are based on Idaho Water Quality Standards (WQS) as described in more detail below.

C. Receiving Waters

The draft GP authorizes discharges of specified pollutants to certain waters of the United States in the state of Idaho during certain times of year. This section summarizes where (in what receiving waters) and when (what times of year) suction dredge placer miners can discharge effluent under the GP. The receiving waters are the waters of the United States in the state of Idaho, most of which are classified in the Idaho WQS [IDAPA 58.01.02] as protected for aquatic life, recreation, water supply, wildlife and aesthetics.

1. Receiving Waters not covered by this GP

The following are the receiving waters excluded from coverage, i.e., this GP does not authorize the discharge from placer mining in the water bodies described below.

National Protected Areas: The draft GP does not apply to facilities that are proposed to be located in National Parks System Units (i.e., Parks and Preserves), National Monuments, National Sanctuaries, National Wildlife Refuges, National Conservation Areas, National Wilderness Areas, or National Critical Habitat Areas.

National Wild and Scenic Rivers: Pursuant to the authorities specified in Section 47-1323, Idaho Code, the State Board of Land Commissioners prohibits dredge mining in any form in water bodies making up part of the National Wild and Scenic Rivers System. This includes the following water bodies: Middle Fork of the Clearwater River, Middle Fork of the Salmon River, and St. Joe River.

Appendix B of this Fact Sheet (Appendix C of the GP), Part 1 provides specific details on the prohibited waterbodies.

Withdrawn River Segments: Pursuant to the authorities specified in Section 58-104(a) and 47-702, Idaho Code, the State Board of Land Commissioners has prohibited recreational dredge and placer mining in certain segments of the following rivers: Boise River, Payette River, Priest River, Salmon River, and Snake River.

Appendix B of this Fact Sheet (Appendix C of the GP), Part 2 provides the complete list of specific withdrawn river segments that are closed to placer mining.

State Protected Rivers: Pursuant to the authorities specified in Section 42-1734A, Idaho Code and adopted by the Idaho Water Resource Board, certain waterways and/or stream segments are protected as either a State Natural River or as a State Recreational River with recreational dredge or placer mining prohibited.

Suction dredge mining is prohibited in portions of the following water bodies: Priest River Drainage, Payette River Drainage, Boise River Drainage, Snake River Drainage, Henry's Fork Snake River Drainage, South Fork Snake River Drainage, North Fork Clearwater River Drainage, and Main Salmon River Drainage.

Appendix B of this Fact Sheet (Appendix C of the GP), Part 3 provides a complete list of the segments of State Protected Rivers where placer mining is prohibited.

Water Quality Limited Segments: A water quality limited segment is any waterbody, or definable portion of a waterbody, where it is known that the water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards. Under CWA § 303(d) of the CWA, states must identify and list water quality limited segments.

CWA § 303(d) requires states to develop a Total Maximum Daily Load (TMDL) management plan for impaired waterbodies on the list. A TMDL is a mechanism for estimating the assimilative capacity of a water body and allocating the capacity between point and nonpoint sources.

There are many waterbodies identified on the State of Idaho's 303(d) list as water quality limited for sediments. This permit does not authorize discharges from placer mining operations in these waterbodies, unless there is a TMDL that specifies waste load allocations for placer mining activities. Currently the only sediment TMDL that specifies allocations for placer mining is the South Fork Clearwater TMDL.

Appendix B of this Fact Sheet (Appendix C of the GP), Part 4 contains an internet link to a current list of segments that are water quality limited for sediment as of December 2008 and are therefore not included in the coverage area of this GP. IDEQ may be updating this list during the duration of this GP. Because this general permit does not relieve a permittee of the requirements of other applicable federal, state or local laws, it is the responsibility of the permittee to contact IDEQ for the most up-to-date list. Pages 2 and 3 of this Fact Sheet and Appendix A of the draft GP contain contact information.

2. Receiving Waters Covered Under This GP

The IDWR's permit contains closed areas as well as timing restrictions. EPA is including the current list in Appendix C of this Fact Sheet. The GP does not contain this list since it could be updated during the duration of the GP. Instead, a requirement to contact IDWR for the most current list of closures and timing restrictions is included. Because this GP does not relieve a permittee of the requirements of other applicable federal, state or local laws, compliance with the IDWR or IDEQ restrictions is expected.

III. OBTAINING COVERAGE UNDER THE GP

Suction dredge operators seeking authorization to discharge under this GP must first submit to EPA a written Notice of Intent (NOI) to be covered. See 40 CFR 122.28(b)(2).

The required contents of the NOI are specified in Appendix A of the draft GP and include information necessary for EPA to adequately implement the NPDES program and GP. The NOI must include the following information: legal name and address of the owner and operator; the operation name; the nature and size of the operation; the name of the receiving stream and location of discharge; the contact information for Idaho Department of Water Resources (IDWR) and, the dates of operation.

All operators that wish to be covered under this GP must meet the requirements of the permit, submit an NOI, and must receive written authorization to discharge from EPA.

After EPA receives an NOI, EPA will provide written authorization to the permittee regarding coverage under the GP. In certain circumstances, EPA may require the facility to apply for and obtain an individual NPDES permit. These situations are described in Permit Part I.F.1. and include circumstances where:

- the single discharge or the cumulative number of discharges is/are a significant contributor of pollution
- the discharger is not in compliance with the GP
- a change occurred in the pollutant control technology or practices
- effluent limitation guidelines are promulgated for the point sources covered by the GP
- a Water Quality Management Plan containing requirements applicable to such point sources is approved
- a TMDL and corresponding wasteload allocation has been completed for a waterbody
- circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the GP

There are also situations where EPA may deny coverage under the GP. These are described in Permit Part I.F.2. and include circumstances where:.

- a land management agency with jurisdiction over affected portions of the receiving water submits to EPA a request that GP coverage be denied within 30 days of EPA's receipt of the NOI
- the land management agency's request includes proposed additional or revised permit terms that the requesting agency believes are necessary to protect the natural values of the affected location
- the land management agency's request concerns a person who either seeks to discharge into waters of the U.S. located in certain protected areas, is in significant noncompliance with the permit, or intends to discharge into impaired waters
- the National Marine Fisheries Service (NMFS) or the U.S. Fish and Wildlife Service (USFWS) believes that consultation under Section 7 of the Endangered Species Act is necessary for suction dredge operations to protect listed threatened and endangered species and their habitat.

IV. EFFLUENT LIMITATIONS REQUIRED BY THE GENERAL PERMIT

A. Statutory Requirements for Determining Effluent Limits

NPDES permit conditions are developed in accordance with various statutory and regulatory authorities established pursuant to the CWA. CWA Sections 101,

301(b), 304, 308, 401, and 402 provide the process and statutory basis for the effluent limitations and other conditions in the NPDES permit. The EPA evaluates discharges with respect to these sections of the CWA and the relevant NPDES regulations in determining which conditions to include in the permit.

In establishing permit limits, EPA first determines which technology-based limits apply to the discharges in accordance with national effluent guidelines and standards. EPA then determines which water quality-based limits apply to the discharges based upon an assessment of the pollutants to be discharged and a review of state water quality standards. The effluent limit for a particular pollutant is the more stringent of the technology-based effluent limit or the water quality-based effluent limit.

B. Technology-based Effluent Limitations

CWA § 301(b) requires technology-based controls on effluents. EPA has established technology-based controls, also called effluent limitation guidelines (ELGs), for numerous industry categories. On May 24, 1988, EPA established ELGs for the Gold Placer Miner industry. However, these guidelines apply to mechanical placer mining and certain large dredging operations but do not apply to small suction dredge operations. In the absence of established ELGs, EPA may establish limits based upon Best Professional Judgment (CWA 402(a)(1) and 40 CFR 122.43, 122.44, 125.3).

It is EPA's Best Professional Judgment (BPJ) that Best Management Practices (BMPs) be established to minimize environmental impacts of the sediment in discharges from suction dredge operations. BMPs are commonly required in NPDES permits. BMPs are measures that are intended to prevent or minimize the generation and the potential for the release of pollutants from facilities to the waters of the United States.

The use of BMPs is allowed under CWA § 402(a)(2) and 40 CFR 122.44(k)(2) of the NPDES regulations. 40 CFR 122.44(k)(2) allows the inclusion of BMPs in lieu of numerical effluent limits under certain circumstances including where numeric effluent limits are infeasible or the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

Suction dredging's unique method of intake and displacement present unusual permitting issues. As discussed above, a suction dredge is a mechanical device that floats on the stream surface and pumps stream water and stream bed material through a suction intake conduit to a sluice box from which gold or other minerals may be recovered.

The discharge from suction dredges consists totally of stream water and bed material immediately released back into the receiving water. It is infeasible to establish numeric limits directly to the discharge point, therefore BMPs are required in the permit to reduce the discharge of sediment and meet the intent of the CWA.

The specific BMPs included in the draft permit are described in Section V. of the Fact Sheet.

C. Water quality-based Effluent Limitations

CWA § 301(b)(1)(C) requires the establishment of limitations in permits necessary to meet water quality standards. All discharges to state waters must comply with state water quality standards, including the state's antidegradation policy. The NPDES regulations at 40 CFR 122.44(d)(1) implement CWA § 301(b)(1)(C). These regulations require that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard (WQS). The limits must be stringent enough to ensure that WQS are met and must be consistent with any available waste load allocation.

As discussed previously, the primary pollutant of concern in the discharge of effluent from suction dredge operations is suspended solids which can be measured by turbidity. Turbidity is a measure of light transmission and is measured in nephelometric turbidity units (NTUs). High levels of turbidity can adversely impact water quality and can have indirect effects on fish and other aquatic life. The State of Idaho has established the following turbidity standard for protection of the cold water aquatic life beneficial use:

> Turbidity, below any applicable mixing zone set by the Department, shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days.

IDEQ has also established a turbidity standard for small public water supplies:

> Turbidity as measured at the public water intake shall not be (1) increased by more than 5 NTU above natural background, measured at a location upstream from or not influenced by an human induced nonpoint source activity when background turbidity is 50 NTU or less or (2) increased by more than 10% above natural background, measured at a location upstream from or not influenced by any human induced nonpoint source activity, not to exceed 25 NTU, when background turbidity is greater than 50 NTU.

Water quality-based effluent limits for turbidity are included in the draft GP. One set of limits applies specifically to operations in the South Fork Clearwater River based on the South Fork Clearwater TMDL. The other set of limits applies to suction dredge operations in other watersheds. These limits are described below.

1. Turbidity Limits and Monitoring Required for All Dischargers

The permit requires BMPs to reduce turbidity and to monitor to ensure that the BMPs are implemented properly. Proper implementation of BMPs will be protective of the Idaho WQS for turbidity.

In addition, the draft GP includes the following turbidity effluent limit:

> Any visible increase in turbidity (any cloudiness or muddiness) above background beyond any point more than 500 feet downstream of the suction dredge during operations is considered a violation of this permit. This requirement includes any turbidity that may result from any other part of the operation.

The 500 foot distance downstream is based upon the mixing zone included in the draft CWA § 401 Certification (Appendix D) from the State of Idaho. After the public comment period, the State will issue a final CWA § 401 certification. The mixing zone size in the final permit will be based on the State's final certification.

A mixing zone is a defined area or volume of receiving water around a wastewater discharge where the receiving water, as a result of the discharge, may not meet all applicable WQS. State WQS can be exceeded in the mixing zone, as long as acutely toxic conditions are prevented and the mixing zone does not impair the beneficial uses of the receiving water. Any authorized mixing zone will ensure that the WQS are met at all points outside the mixing zone.

The draft permit requires that the permittee conduct a daily visual inspection to monitor turbidity within the area 500 feet downstream of the suction dredge during operation

If any visible increase in turbidity is observed above background beyond any point more than 500 feet downstream of the dredge, it is a violation of the GP and the permittee must modify the operation to meet the permit limitation or cease operations.

2. Turbidity Limits for Dischargers to the South Fork Clearwater River

The NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B) require that effluent limits be consistent with the assumptions and requirements of any available wasteload allocation (WLA) for the discharge in an approved TMDL. EPA reviewed the approved TMDLs for sediment impaired streams and found only one, the TMDL for the South Fork Clearwater River, that included WLAs for suction dredge operations. This TMDL was approved by EPA in July 2004.

The SF Clearwater River TMDL specified the following WLAs for the suction dredge industry. These WLAs are established as effluent limits in the draft GP.

<u>South Fork Clearwater River above Harpster Bridge, including tributaries:</u>

July 15 – August 15:

- When background turbidity is 50 NTU or less: Turbidity below the 500 foot mixing zone shall not exceed background turbidity by more than 5 NTU :

  Visual monitoring is required to ensure compliance with this effluent limit

- When background turbidity is more than 50 NTU: Turbidity below the 500 foot mixing zone shall not exceed background turbidity by more than 10% and shall not exceed a maximum increase of 25 NTU, and

- 314 tons/day total sediment discharge to the bed of the stream

  The TMDL developed for this stream reach allows a daily mass sediment loading of 314 tons/day. The development of this was based on 15 dredges operating for 8 hours a day mining no more than 2 cubic yards (yd^3)/hour. Based on this information, EPA is proposing that facilities on the SF Clearwater operate under these conditions and reapply for GP coverage on an annual basis so no more than 15 authorizations will be granted during any one year.

  To facilitate this process, EPA is proposing that NOIs be submitted on an annual basis starting on April 1st. EPA would cover the first 15 NOI submittals and notify additional applicants that coverage is no longer available.

August 16 – July 14:

- The TMDL specifies that zero wasteload allocation is available between August 16 and July 14. Therefore, no discharges are allowed to the SF Clearwater River above Harpster bridge and tributaries between August 16 and July 14.

<u>South Fork Clearwater River below Harpster Bridge</u>:

The TMDL specifies that zero wasteload allocation for the entire year. Therefore, no discharges are allowed at any time to the SF Clearwater River below Harpster Bridge.

D. Monitoring

Section 308 of the Clean Water Act and the federal regulations at 40 CFR 122.44(i) require that permits include monitoring provisions to determine compliance with effluent limitations. Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. Monitoring frequencies are based upon the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor performance. The permittee is responsible for conducting the monitoring and for reporting results to EPA. The draft permit requires visual

monitoring daily of the suction dredge turbidity plume and recording of the extent downstream that the plume occurs.

V. BEST MANAGEMENT PRACTICES (BMPs)

As discussed in the previous section, the draft GP requires compliance with BMPs to minimize the effect and the potential for the release of turbidity from suction dredge operations.

The draft permit requires compliance with the following BMPs (see Permit Part II.C.):

A. Silt and Clay Areas:

Dredging of concentrated silt and clay should be avoided.

The Permittee shall use reasonable care to avoid dredging silt and clay materials that would result in a significant increase in turbidity. Reasonable care includes moving the dredge to a new location or reducing the volume of effluent discharge by limiting operation speed of the suction dredge.

This practice will decrease the amount of fine material that will be released into the water that could cause turbidity plumes in excess of the permitted distance.

B. Mercury: If mercury is found during suction dredge operation, (i.e. mercury is collected in the sluice box), the operator must:

1. Stop dredging immediately;
2. Contact the local regional office of IDEQ (see Appendix A of the GP);
3. Keep the mercury collected, do not remobilize the collected mercury; and
4. Work with the appropriate regional office of IDEQ to dispose of the mercury properly.

Mercury was used in historic placer mining operations to amalgamate gold fines. Elemental mercury may be present in stream beds and banks and if remobilized can result in impacts to fish and other aquatic life. Placer miners encountering mercury must take the above steps to prevent mercury from reentering the water body.

C. Spacing between operations:

Suction dredges shall not operate within 800 feet of:

1. another suction dredging operation occurring simultaneously or,
2. a location where it is apparent that another operation has taken place within the past month

This practice should ensure that the mixing zone of a facility does not overlap with that of another since 800 feet is the distance of a 500 foot mixing zone for each operation plus a designated 300 foot buffer before the next suction dredge would impact water quality.

D. Fish Passage, Spawning Fish and Spawning Habitat:

1. Dredging and discharging are prohibited within 500 feet of locations where:
   a. fish are spawning or
   b. fish eggs or alevins are known to exist at the time dredging occurs

2. Suction dredge operation must not occur in gravel bar areas at the tail of pools or where operations result in fine sediments discharging onto gravel bars.

3. The Permittee shall ensure there is adequate passage for fish around and through the mining area at all times.

   The following information can be used to determine if you are located in an area that may be a spawning area of a species of concern. These areas should be avoided.

   - Trout construct spawning nests (redds) in clean gravel from 0.25 to 1.5 inches in diameter. The preferred site is a gravel bar at the tail or side of pools covered by 6 to 12 inches of smoothly flowing water. Redds may be recognized as round or oval depressions in the gravel which appear cleaner or brighter than the surrounding gravel.
   - Salmon and Steelhead spawn in similar areas in gravel and cobblestones up to 3-4 inches in diameter.
   - Steelhead, Rainbow and Cutthroat Trout can spawn from March through June, but primarily in the months of April and May, and their eggs and fry remain in the gravel until mid-summer.
   - Spring and Summer Chinook Salmon typically spawn in August and September, Fall Chinook Salmon spawn in October and November. Their eggs and fry remain in the gravel until the following spring.
   - Brook Trout, Brown Trout, Bull Trout, Kokanee and Mountain Whitefish spawn from September into December and their eggs and fry remain in the gravel during winter. Incubation of Bull Trout eggs also occur over a longer period than other species and their young have an extended period of residency in spawning gravels - 200 days as opposed to about 60 days for other trout.
   - Pacific Lamprey are an anadromous species present in the Snake River Drainage utilizing similar stream habitats to Chinook Salmon and Summer Steelhead. Lamprey adults migrate into the Columbia and Snake River basins from June through October, over winter, and spawn during April through July. Spawning substrates are fine to medium size

gravels (0.25 to 1.0 inch diameter). Following a hatching period of 2-3 weeks, larvae (ammocoetes) rear in fine substrates where they remain for over 5 years until the transformation to adult is complete. Adults migrate to the ocean where they become parasitic.

This BMP is designed to minimize impacts to fish spawning and spawning habitat and to provide for fish passage.

E. Stream Channel:

Suction dredge operations must not change the stream channel in such a way that alters the bottom elevation of the active stream channel or redirects the flow of water into the stream bank, which may cause bank erosion or destruction of the natural form (width/depth configuration) of the active stream channel.

Under CWA § 101, EPA is required to restore and maintain the chemical, physical and biological integrity of waters of the United States. Protection of the physical integrity of waterbodies includes protection of habitat which could be impacted by stream bank erosion or destruction of the natural form of the channel.

F. Erosion:

Suction dredge operations that result in undercutting, littoral channeling, stream bank or beach erosion, are prohibited. Removal or disturbance of boulders (cobbles or larger rock) or any type of vegetation (dead or alive) on the stream bank, leading to erosion or undercutting of the banks is prohibited.

In addition, per IDAPA 37.03.07.64.04, the operation of the dredge shall be done in a manner so as to prevent the undercutting of stream banks.

This practice will ensure that erosion does not occur and that the finer sediments that may be found in these areas do not cause turbidity problems in the receiving waters.

G. Dams or Diversions:

Damming or diversions within a stream channel are not authorized by this GP.

EPA cannot authorize dams or diversions under CWA § 402. These are generally authorized under CWA § 404 which is administered by the U.S. Army Corps of Engineers.

H. Boulders and Natural Obstructions:

Explosives, motorized winches or other motorized equipment to move boulders, logs, or other natural obstructions are prohibited under this GP.

This practice should ensure that important habitat which includes large organic debris and large boulders in these areas will not be destroyed.

I. Mechanized Equipment:

Wheeled or tracked equipment use in-stream is prohibited while dredging is in progress.

With the exception of the suction dredge itself and any life support system necessary to operate the dredge, mechanized equipment shall not be used below the mean high water mark.

This practice will minimize turbidity from sources other than the suction dredge.

J. Refueling and Hazardous/Deleterious Material Storage

Care shall be taken by the operator during refueling of equipment to prevent spillage.

The Permittee must check the equipment for fuel and oil leaks daily prior to operation. Equipment must be in proper working order and shall not leak petroleum products.

Any spills shall be cleaned up using materials such as sorbent pads and booms.

All chemical or petroleum products shall be stored in a safe and secure location at all times. Fuel not stored and dispensed with an ANSO or UL approved safety container must be maintained not less than 100 feet from the mean high water mark.

Hazardous and deleterious material must not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to ensure that those materials will not enter state waters as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation or unauthorized third party activities.

Spills shall be reported IDEQ and the National Response Center (see Permit Part II.C.10.e.). Spills of petroleum products that exceed 25 gallons or cause a visible sheen on nearby surface waters should be reported to IDEQ within 24 hours. Spills of petroleum products less than 25 gallons or that do not cause a visible sheen on nearby surface waters should be reported to IDEQ only if cleanup cannot be accomplished within 24 hours.

These practices will decrease the potential for contamination of surface water by petroleum products and other potentially harmful substances.

K. Invasive Species

Pursuant to IDAPA 02.06.09, operators must ensure their dredging equipment does not house invasive species. Equipment must be decontaminated prior to its placement in waters of the state. Furthermore, dredging equipment used in multiple streams should be decontaminated before each deployment. IDEQ Decontamination procedures can be found at:

www.deq.idaho.gov/water/data_reports/surface_water/monitoring/decontamination_procedures.pdf

IDAPA 02.06.09, "Rules Governing Invasive Species." establishes procedures for inspection, certification, permitting, compliance verification, decontamination, recordkeeping and enforcement of regulated Aquatic Invertebrate Invasive Species.

VI. OTHER PERMIT PROVISIONS

Specific regulatory requirements for NPDES permits are contained in 40 CFR 122.41. These conditions are included in the GP in Parts III., IV., and V. as monitoring and reporting requirements, compliance responsibilities, and general requirements. Since these conditions are federal regulations, they cannot be challenged in the context of an NPDES permit action.

VII. OTHER LEGAL REQUIREMENTS

A. Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if the federal action, such as issuing a permit, could beneficially or adversely affect any threatened or endangered (T&E) species.

EPA has prepared a biological evaluation (BE) analyzing the effects of the GP on the listed species. A not likely to adversely effect determination has been made primarily on the basis that dredging operations are closed on streams where and when threatened or endangered species exist.

If necessary, EPA will enter into informal or formal consultation with USFWS and NMFS to ensure that the GP will not result in unacceptable impacts to any of the species identified on these lists.

NMFS has been reviewing applications that propose to alter stream channels and has been providing IDWR with pre-application assistance on possible ESA Section 10 incidental take permits. NMFS will continue to provide comments through this process.
The draft GP contains conditions meant to minimize impacts to T&E species and their habitats. These include the turbidity effluent limits and restrictions on locations and timing of suction dredge activities.

The IDWR recreational placer mining permit does not allow dredging during periods when fish are spawning and eggs or alevins are in the gravel. The following is information from the IDWR permit that is also included in the draft GP:

To protect important spawning populations of salmon, steelhead, and trout, streams are closed to dredging during the periods when fish are spawning and eggs or alevins are in the gravel. Because different species of fish spawn at

different times, some streams have fish eggs or alevins in the gravel during every month of the year and are therefore closed year round to dredging (See Appendix C for more details).

Critical habitat was designated for the Snake River Sockeye Salmon (Oncorhynchus nerka); Snake River Spring/Summer Chinook Salmon (Oncorhynchus tshawytscha) and Snake River Fall Chinook Salmon (Oncorhynchus tshawytscha) in December 1993. Critical habitat was designated for Snake River Steelhead in 2005. Critical habitat was designated for the Bull Trout (Salvelinus confluentus) in 2005. Revised critical habitat was designated for the Kootenai River White Sturgeon on July 9, 2008. Critical habitat for the KR white sturgeon consists of 18.3 river miles of the Kootenai River within Boundary County, Idaho, from river mile 141.4 to river mile 159.7.

The critical habitat in Idaho for the Snake River Salmon, Steelhead and Bull Trout is described as follows:

Snake River Sockeye Salmon

Consists of river reaches of the Columbia, Snake and Salmon Rivers, Alturas Lake Creek, Valley Creek, and Stanley, Redfish, Yellow Belly, Pettit and Alturas lakes (including their inlet and outlet creeks)

Snake River Spring/Summer Chinook Salmon

Consists of river reaches of the Columbia, Snake, and Salmon Rivers, all tributaries of the Snake and Salmon Rivers (except the Clearwater River) presently or historically accessible to Snake River Spring/Summer Chinook Salmon (except reaches above impassable natural falls and Hells Canyon Dam)

Snake River Steelhead

Consists of river reaches of the Columbia, Snake, and Salmon Rivers, and all tributaries of the Snake and Salmon River presently or historically accessible to Snake River Steelhead (except reaches above impassable natural falls, Dworshak Dam and Hells Canyon Dam)

Bull Trout

Consists of Lake Pend Oreille Subunit of Clark Fork River Drainage (East River, Gold Creek, Granite Creek, Grouse Creek, Lightning Creek, Middle Fork East River, N.F. Grouse Creek, Pack River, Priest River, Tarlac Creek, Trestle Creek, Twin Creek, and Uleda Creek). The Priest Lake and River Subunit (Cedar Creek, Granite Creek, Hughes Fork, Indian Creek, Kalispell Creek, Lion Creek, N.F. Indian Creek, Soldier Creek, S.F. Granite Creek, S.F. Indian Creek, S.F. Lion Creek, Trapper Creek, Two Mouth Creek, and Upper Priest River). The Coeur d'Alene Lake Drainage (Beaver Creek, Coeur d'Alene Lake and River, Eagle Creek, Fly Creek, North Fork Coeur d'Alene River, Prichard Creek, Ruby Creek,

St. Joe River, Steamboat Creek, and Timber Creek). The Snake River in Adams and Washington Counties.

In streams where suction dredging occurs, the most critical life stage for salmon is the egg stage. To protect important spawning populations of salmon, steelhead and trout, streams are closed to dredging during the periods when fish are spawning and eggs or alevins are in the gravel.

B. Essential Fish Habitat (EFH)

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act set forth a number of new mandates for NMFS, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish habitat. The action agency needs to make a determination on Federal actions that may adversely impact EFH.

In freshwaters, the GP is unlikely to be used during the critical phase (egg stage) and if it were, studies show that the impacts of an operation are minimal after 500 feet so a 500 foot buffer (Permit Part II.C.4.a.) should be sufficient protection. EPA determines that, with the inclusion of the 500 feet buffer, no adverse impact to EFH would result from the issuance of this permit. This EFH assessment is documented in the BE for this GP.

C. National Forest System Lands

Dredging activities under the GP on National Forest System Lands must comply with US Forest Service Mining regulations found at 36 CFR 228A. These regulations require that a “notice of intent to operate” be submitted to the US Forest Service District Ranger who is in charge of the area on which the proposed operation will take place.

D. State Permit Requirements

Pursuant to IDAPA 37.03.07, operators must obtain a recreation dredging permit from the Idaho Department of Water Resources. An application may be obtained from the following web page:

www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/DredgingPermit/DredgingPermit.htm

E. State Certification

CWA § 401 prohibits EPA from issuing a permit which may result in any discharge to navigable waters until the State in which the discharge will originate has certified that the discharge will comply with certain CWA provisions (or has waived certification). The regulations at 40 CFR 124.53 allow for the State to require more stringent conditions in the permit, if the certification cites the CWA or State law references upon which that condition is based. In addition, the regulations require

a certification to include statements of the extent to which each condition of the permit can be made less stringent without violating the requirements of State law.

The State of Idaho, Department of Environmental Quality, provided EPA with their draft CWA § 401 Certification for the draft GP on November 13, 2009. See Appendix D for certification conditions.

After public comments have been evaluated, a preliminary final GP will be sent to the State to begin the final certification process. If the state authorizes different or additional conditions as part of the certification, the permit may be changed to reflect these conditions.

F. Antidegradation

In setting permit conditions, EPA must consider the State's antidegradation policy. This policy is designed to protect existing water quality when the existing water quality is better than that required to meet the standards and to protect water quality from being degraded below the standard when existing quality meets the standard. For high quality waters, antidegradation requires that the State find that allowing lower water quality is necessary to accommodate important economic or social development before any degradation is authorized.

The draft GP does not authorize discharges from suction dredge mining in streams that are already impaired for sediments. The one exception is the allowance for suction dredge discharges in some parts of the South Fork Clearwater during certain times of year under the conditions recommended in the SF Clearwater TMDL that are meant to bring the SF Clearwater into compliance with WQS.

For waters that are not impaired, discharges from suction dredge operations are allowed in certain waters and at certain times of year under the conditions of the draft GP. The draft permit limits turbidity and requires use of BMPs. IDEQ has indicated in their preliminary certification that the permit complies with the State's antidegradation requirements.

G. Permit Expiration

This permit will expire five years from the effective date of the permit.

APPENDIX A – REFERENCES

NPDES Permit Writer's Manual. EPA, Office of Water, Office of Wastewater Management, Permits Division. Washington, DC. 20460; EPA-833-B-96-003, December 1996, 220pp.

Technical Support Document for Water Quality-based Toxics Control. EPA, Office of Water Enforcement and Permits, Office of Water Regulations and Standards. Washington, DC, 20460; EPA/505/2-90-001, March 1991, 145pp.

Instructions for Idaho Department of Water Resources Recreational Dredging Permit Application. IDWR, Boise, ID. February 2009, 26 pp.

Impact of suction dredging on water quality, benthic habitat, and biota in the Fortymile River, Resurrection Creek, and Chatanika River, Alaska. Prepared for EPA by Aaron M. Prussian, Todd V. Royer, and G. Wayne Minshall, Idaho State University. June 1999.

Regional Baseline Geochemisty and Environmental Effects of Gold Placer Mining Operations on the Fortymile River, Eastern Alaska. Department of Interior, U.S. Geological Survey. Open-File Report 99-328. 1999.

Regional Geochemical Results from the Analyses of Rock, Water, Soil, Stream Sediment, and Vegetation Samples--Fortymile River Watershed, East-Central Alaska. Department of Interior, U.S. Geological Survey. Open-File Report 99-33. 1999.

South Fork Clearwater River Subbasin Assessment and Total Maximum Daily Loads. Idaho Department of Environmental Quality and EPA in consultation with the South Fork Clearwater River Watershed Advisory Group.

APPENDIX B
Waterbodies Where Placer Mining is Not Authorized Under the General Permit

Part 1: National Wild and Scenic Rivers

Pursuant to the authorities specified in Section 47-1323, Idaho Code, the State Board of Land Commissioners prohibited dredge mining in any form from water bodies making up part of the National Wild and Scenic Rivers System.

1. Middle Fork of the Clearwater River

   From the town of Kooskia upstream to the town of Lowell; the Lochsa River from its junction with the Selway at Lowell forming the Middle Fork, upstream to the Powell ranger station; and the Selway River from Lowell upstream to its origin.

2. Middle Fork of the Salmon River

   From its origin to its confluence with the main Salmon River.

3. St. Joe River

   Including tributaries, from its origin to its confluence with Coeur d'Alene Lake, except for the St. Maries River and its tributaries.

Part 2: Withdrawn River Segments

Pursuant to Section 58-104(a) and 47-702, Idaho Code, the State Board of Land Commissioners has prohibited recreational dredge or placer mining in the following segments.

1. Boise River

   a. The Bed of the South Fork of the Boise River from Anderson Ranch Dam in T01S, R08E, downstream to Neal Bridge in Section 34, T03N, R06E.

   b. The Bed of the Middle Fork of the Boise River from the east boundary of T05N, R08E, downstream to the west boundary of Section 1, T03N, R05E.

   c. The Bed of the Boise River from Lucky Peak Dam in T02N, R03E, down River to Star Highway in T04N, R01W. Note: This withdrawal does not include the removal of sand and gravel, which is necessary for flood control purposes.

2. Payette River

   a. The Bed of the North Fork of the Payette River, from Cabarton Bridge to Banks, between the ordinary high water marks, situated in Section 31, T13N, R 05E, to Section 32, T 09N, R 03E.

b. The Bed of the South Fork of the Payette River from the Sawtooth Wilderness Boundary to Banks, between the ordinary high water marks, situated in Section 12, T 09N, R09E to Section 32, T 09N, R 03E.

c. The Bed of the Main Payette River, from Banks to Black Canyon Dam, between the ordinary high water marks, situated in Section 32, T09N, R03E, to Section 22, T07N, R01W.

3. Priest River

a. The Bed of Upper Priest River, from the Canadian border to the confluence with Priest Lake, between the ordinary high water marks, situated in Section 12, T65N, R05W, B.M., to Section 19, T63N, R04W.

4. Salmon River

a. The Bed of the Salmon River from the mouth of the North Fork of the Salmon River in T24N, R21E, downstream to Long Tom Bar. The Bed of the Salmon River from the mouth in T29N, R04W, upstream to Hammer Creek in T28N, R01E. The Bed of the Middle Fork of the Salmon River from its origin to its confluence with the main Salmon River. The Bed of the South Fork of the Salmon River from the mouth through T20N, R06E.

5. Snake River

a. The Bed of the Henry's Fork of the Snake River from its point of origin at Henry's Fork to the point of its confluence with the backwaters of Ashton Reservoir, situated in Section 21, T15N, R43E, to Section 13, T09N, R42E.

b. The Bed of the Snake River from the east boundary of T06S, R08E, to the west boundary of T01S, R02W, encompassing the Birds of Prey Area.

c. The Bed of the Snake River from the mouth of the east ordinary high water mark to the center of the main channel (State of Idaho ownership in the Hells Canyon National Recreation Area), from the north boundary of T20N, R04W to the south boundary of T31N, R05W.

Part 3: State Protected Rivers

Pursuant to the authorities specified in Section 42-1734A, Idaho code and adopted by the Idaho Water Resource Board, the following waterways and/or stream segments are protected as either a State Natural River or as a State Recreational River with recreational dredge or placer mining prohibited.

1. Priest River Drainage

- Upper Priest River, International Boundary to confluence with Upper Priest Lake

- Upper Priest Lake
- The Thoroughfare, Upper Priest Lake to beginning of private property along south bank.
- The Hughes Fork, headwaters to mouth
- Rock Creek, headwaters to mouth
- Lime Creek, headwaters to mouth
- Cedar Creek, headwaters to mouth
- Trapper Creek, headwaters to mouth
- Granite Creek, confluence of its North and South Forks to mouth
- Priest River, Priest Lake outlet structure to McAbee Falls
- Lion Creek, headwaters to mouth
- Two Mouth Creek, headwaters to mouth
- Indian Creek, headwaters to mouth

2. Payette River Drainage

- South Fork Payette River, Deadwood River to Big Pine Creek
- Payette River, confluence of its South and Middle Forks to Beehive Bend
- North Fork Payette River, Cabarton Bridge to mouth
- North Fork Payette, headwaters (includes Cloochman and Trail Creeks) to Payette Lake inlet

3. Boise River Drainage

- South Fork Boise River, Anderson Ranch Dam to a point 250 yards upstream of Neal Bridge
- Lime Creek and all tributaries, headwaters to mouth
- Big Smoky Creek and all tributaries, headwaters to mouth
- Boise River, from confluence of its North and Middle Forks to backwaters of Arrowrock Reservoir
- Sheep Creek, headwaters to mouth
- South Fork Sheep Creek, headwaters to mouth
- Devils Creek, headwaters to mouth
- East Fork Sheep Creek, headwaters to mouth
- Middle Fork Boise River, mouth of Roaring River to confluence with the North Fork Boise River
- Roaring River, headwaters to mouth
- East Fork Roaring River, headwaters to mouth
- Middle Fork Roaring River, headwaters to mouth
- North Fork Boise River, mouth of Crooked River to confluence with the Middle Fork Boise River
- North Fork Boise River, Sawtooth Wilderness Area to mouth of Hunter Creek
- McNutt Creek, headwaters to mouth
- Taylor Creek, headwaters to mouth

3. Boise River Drainage Continued

- McDonald Creek, headwaters to mouth
- Horsefly Creek, headwaters to mouth
- Blue Jay Creek, headwaters to mouth
- Lodge Pole Creek, headwaters to mouth
- Bow Creek, headwaters to mouth
- Big Silver Creek, headwaters to mouth
- Johnson Creek, Sawtooth Wilderness Area to mouth
- Robin Creek, headwaters to mouth
- Grouse Creek, headwaters to mouth

4. Snake River Drainage

- Snake River, downstream boundary of the Milner Hydroelectric Project to Clover Creek, but excluding hydroelectric project boundaries.

5. Henry's Fork Snake River Drainage

- Targhee Creek, including West and East Forks, source to National Forest boundary
- Henry's Fork, Big Springs to Island Park Reservoir, and the lower 2 miles of Henry's Lake Outlet
- Henry's Fork, Island Park Reservoir to Ashton Reservoir
- Golden Lake
- Silver Lake
- Thurman Creek, Golden Lake to mouth
- Buffalo River springs approximately 8 miles upstream of mouth to mouth
- Elk Creek, right-of-way lines below Elk Creek Dam to mouth
- Warm River, Partridge Creek to upper boundary of Warm River Campground
- Robinson Creek, Yellowstone Park boundary to mouth
- Rock Creek, Yellowstone Park boundary to mouth
- Henry's Fork, Ashton Dam to Falls River
- Falls River, Idaho border to Kirkham Bridge
- Boone Creek, Idaho border to mouth
- Conant Creek, Idaho border to Conant Creek diversion structure
- Teton River, Trail Creek to Felt Dam
- Teton Creek springs near Highway 33 to mouth
- Fox Creek springs approximately 2.5 miles upstream of mouth to mouth
- Badger Creek springs approximately 3 miles upstream of mouth to mouth
- Bitch Creek, Idaho border to mouth

6. South Fork Snake River Drainage

- South Fork Snake River, Palisades Dam to confluence with Henry's Fork
- Fish Creek, headwaters to confluence with McCoy Creek

6. South Fork Snake River Drainage, cont.

- South Fork Snake River, Palisades Dam to confluence with Henry's Fork
- Fish Creek, headwaters to confluence with McCoy Creek

- Big Elk Creek, Idaho-Wyoming state line to Palisades Reservoir backwaters
- Little Elk Creek, headwaters to Palisades Reservoir backwaters
- Bear Creek and perennial tributaries, headwaters to Palisades Reservoir backwaters and the following perennial tributaries:

  ○ South Fork Bear Creek, headwaters to mouth
  ○ Deadman Creek, headwaters to mouth
  ○ Warm Springs Creek, headwaters to mouth
  ○ North Fork Bear Creek, headwaters to mouth
  ○ Small Creek, headwaters to mouth
  ○ Poison Creek, headwaters to mouth
  ○ Currant Creek, headwaters to mouth
  ○ Muddy Creek, headwaters to mouth
  ○ Elk Creek, headwaters to mouth

- Palisades Creek and perennial tributaries, headwaters to South Fork Snake Confluence and the following perennial tributaries:

  o North Fork Palisades Creek, headwaters to mouth
  o East Fork Palisades Creek, Idaho-Wyoming state line to mouth
  o Corral Creek, Idaho-Wyoming state line to mouth
  o Lost Spring Canyon, headwaters to mouth
  o Dead Man Canyon, headwaters to mouth
  o Little Dry Canyon, headwaters to mouth
  o Dry Canyon, headwaters to mouth, including Upper Palisades Lake
  o Water Fall Canyon, headwaters to confluence with Dry Canyon

- Fall Creek and perennial tributaries, headwaters to mouth, and the following perennial tributaries:

  o East Fork Fall Creek, headwaters to mouth
  o Willow Springs Creek, headwaters to mouth
  o Beaver Creek, headwaters to mouth
  o Trap Creek, headwaters to mouth
  o Haskin Creek, headwaters to mouth
  o Camp Creek, headwaters to mouth
  o Gibson Creek, headwaters to mouth
  o Blacktail Creek, headwaters to mouth
  o South Fork Fall Creek, headwaters to mouth
  o Currant Hollow, headwaters to mouth

- Pine Creek and perennial tributaries, headwaters to confluence with South Fork Snake River, and the following perennial tributaries:

6. South Fork Snake River Drainage, cont.

    - Tie Canyon, headwaters to mouth
    - Poison Canyon, headwaters to mouth
    - Mike Spencer Canyon, headwaters to mouth

- North Fork Pine Creek and perennial tributaries, headwaters to mouth, and the following perennial tributaries:

    - Elk Flat Fork, headwaters to mouth
    - Holter Creek, headwaters to mouth
    - Red Creek, headwaters to mouth
    - Corral Creek, headwaters to mouth
    - Lookingglass Creek, headwaters to mouth

- West Pine Creek, headwaters to mouth, including unnamed headwater tributaries.

- Burns Creek and perennial tributaries, headwaters (including unnamed headwater tributaries) to South Fork Snake Confluence, and the following perennial tributaries:

    - Beartrap Canyon, headwaters to mouth
    - Little Burns Canyon, headwaters to mouth
    - Jensen Creek, headwaters to mouth
    - Hell Hole Canyon, headwaters to mouth

- Burns Creek (tributary to reservoir), headwaters to Idaho-Wyoming state line

- Trout Creek, headwaters (including all unnamed headwater tributaries), to confluence with Palisades Reservoir

- McCoy Creek and perennial tributaries, Fish Creek Confluence to backwaters of Palisades Reservoir, and the following perennial tributaries:

    - Spring Creek, headwaters to mouth
    - Clear Creek, headwaters to mouth
    - Wolverine Creek, headwaters to mouth
    - Kirk Creek, headwaters to mouth
    - Box Canyon Creek, headwaters to mouth

- McCoy Creek and perennial tributaries, Fish Creek Confluence to backwaters of Palisades Reservoir, and the following perennial tributaries continued:

    - Hell Creek, headwaters to mouth
    - Jensen Creek, headwaters to mouth
    - Bitters Creek, headwaters to mouth

- Indian Creek (tributary to Palisades Reservoir)-Idaho-Wyoming state line to

6. South Fork Snake River Drainage, cont.

    Smith Canyon.
    - Sheep Creek, headwaters to South Fork Snake Confluence
    - Indian Creek (tributary to South Fork Snake River), headwaters to South Fork Snake Confluence
    - Rainey Creek and perennial tributaries, headwaters to South Fork Snake Confluence, and the following perennial tributaries:
        - North Fork Rainey Creek, headwaters to mouth
        - South Fork Rainey Creek, headwaters to mouth
    - Prichard Creek, headwaters to South Fork Snake Confluence
    - Black Canyon, headwaters to South Fork Snake Confluence
    - Warm Springs, source to South Fork Snake Confluence
    - Wolverine Creek, headwaters to South Fork Snake confluence
    - Cress Creek, source to South Fork Snake confluence

7. North Fork Clearwater River Drainage

    - Isabella Creek, headwaters to mouth
    - Weitas Creek, headwaters to mouth
    - Little North Fork Clearwater River, Meadow Creek to Cedar Creek
    - North Fork Clearwater River, headwaters to Wrangler Creek and from Isabella Creek to the backwater of Dworshak Reservoir (Thompson Creek)
    - Reeds Creek, Calhoun Creek to mouth
    - Beaver Creek, Charlie Creek to mouth

8. North Fork Clearwater River Drainage

    - Little North Fork Clearwater River, headwaters to backwaters of Dworshak Reservoir at Meadows Creek
    - Elk Creek, headwaters to Deep Creek
    - Kelly Creek, headwaters to mouth
    - Cayuse Creek, headwaters to mouth

9. Main Salmon River Drainage

    - Little Salmon River - Hwy 95 bridge above “The Falls” to confluence with the Salmon River
    - Boulder Creek - from its headwaters to its confluence with the Little Salmon River
    - Hard Creek - from its headwaters to its confluence with Hazard Creek
    - Hazard Creek - from the outlet of Hazard Lake downstream to its confluence with the Little Salmon River

Part 4: 303(d) Listed Waterbodies for Sediments

Discharges from suction dredge operations are not authorized in waterbodies that are listed for sediment.

The Idaho Department of Environmental Quality's document: Final 2008 Integrated Report, Section 5: Impaired Waters: Lakes and Rivers ("§303(d) list"), which was approved by EPA, contains the list of water quality limited waterbodies.

The document can be accessed at:
http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/2008.cfm

It is the responsibility of the Permittee to check the website or contact IDEQ for the most up-to-date, EPA approved, 303(d) list.

APPENDIX C – Areas of Coverage/Areas of Closure

The following is a list of waterbodies that are open for dredging and the times of year that they are open. This list also specifies closed areas. The waterbodies are organized by river drainage. This list is current per the IDWR Instruction Booklet published in 2009. Please note if you apply after the 2009 dredging season, you must consult the most up-to-date version of the area of coverage/areas of closure list or contact EPA for the most up-to-date list.

Table C-1	**OPEN**	**CLOSED**
Kootenai River Drainage		
Kootenai River & tribs not listed	July 15 - Aug 15	Aug 16 - July 14
Myrtle Creek & tribs		Entire year
Long Canyon Creek & tribs		Entire year
Parker Creek & tribs		Entire year
Callahan Creek & tribs		Entire year
N. Callahan Creek & tribs		Entire year
S. Callahan Creek & tribs		Entire year
Boulder Creek & tribs		Entire year
Debit Creek & tribs		Entire year
Caboose Creek & tribs		Entire year
Curley Creek & tribs		Entire year
Snow Creek & tribs		Entire year
Moyie River Drainage		
Moyie River & tribs not listed	July 15 - Aug 15	Aug 16 - July 14
Canuck Creek & tribs		Entire year
Keno Creek & tribs		Entire year
Spruce Creek & tribs		Entire year
Deep Creek Drainage		
Deep Creek & tribs not listed	July 15 - Aug 15	Aug 16 - July 14
Trail Creek & tribs		Entire year
Ruby Creek & tribs		Entire year
Fall Creek & tribs		Entire year
Boundary Creek Drainage		
Boundary Ck. & tribs not listed	July 15 - Aug 15	Aug 16 - July 14
Grass Creek & tribs		Entire year
Saddle Creek & tribs		Entire year
Pend Oreille Lake Drainage		
Pend Oreille Lake drainage not listed	July 15 - Aug 15	Aug 16 - July 14
Pack River & tribs		Entire year
Grouse Creek & Tribs		Entire year
Trestle Creek & tribs		Entire year

Table C-1	**OPEN**	**CLOSED**
Rapid Lightning Creek & tribs		Entire year
Lightning Creek & tribs		Entire year
E. Fork Lightning Creek & tribs		Entire year
Savage Creek & tribs		Entire year
Char Creek & tribs		Entire year
Porcupine Creek & tribs		Entire year
Wellington Creek & tribs		Entire year
Rattle Creek & tribs		Entire year
Morris Creek & tribs		Entire year
Clark Fork to Montana border & tribs		Entire year
Twin Creek & tribs		Entire year
Johnson Creek & tribs		Entire year
Granite Creek & tribs		Entire year
Sullivan Springs & tribs		Entire year
Gold Creek & tribs		Entire year
N. Gold Creek & tribs		Entire year
Strong Creek & tribs		Entire year
Priest River Drainage		Entire year
Spokane River Drainage		
Spokane River & tribs not listed	July 15 - Aug 15	Aug 16 - July 14
N.F.of the Coeur d'Alene & tribs		
above Yellow Dog Creek		Entire year
Little N.F. the Cd'A River & tribs		
above Laverne Creek		Entire year
Prichard Creek & tribs.		
below Granite Creek	Jan 1 - Dec 31	
Prichard Creek & tribs. N.F. Cd'A		
above Granite Creek	July 15 - Aug 15	Aug 16 - July 14
W.F. Eagle Creek & tribs		
above Bobtail Creek		Entire year
Beaver Creek & tribs. below Delta	Jan 1 - Dec 31	
Beaver Creek & tribs. above Delta	July 15 - Aug 15	Aug 16 - July 14
Shoshone Creek & tribs above Ulm Creek		Entire year
Brown Creek & tribs	July 15 - Aug 15	Aug 16 - July 14
Cougar Creek & tribs	July 15 - Aug 15	Aug 16 - July 14
St. Joe River Drainage		
St. Joe River & tribs not listed		Entire year
St. Maries River & tribs	July 15 **-** Aug 15	Aug 16 **-** July 14
Palouse River Drainage		
Palouse River & tribs	Jan 1 - Dec 31	
Clearwater River Drainage		

Table C-1	**OPEN**	**CLOSED**
Clearwater River	July 1 - Sept 15	Sept 16 - June 30
Orofino Cr above Orofino Cr Falls	July 1 - Mar 31	Apr 1 - June 30
Mouth to Kooskia	July 1 - Sept 15	Sept 16 - June 30
S.F. Clearwater River, from		
confluence of the Clearwater River to		
the confluence with the Red and		
American Rivers	July 25 - Aug 15	Aug 16 - July 24
All other portions of S.F.		
Clearwater River and tribs.		Entire year
North Fork Clearwater River from		
Kelly Cr. to Isabella Cr .	July 1 - Aug 15	Aug 16 - June 30
Orogrande Creek (trib. to N.F.)	July 1 – Aug 15	Aug 16 - June 30
Little N.F. Clearwater & tribs.		Entire year
Salmon River Drainage		
Main Salmon River from		
Hammer Creek to Long Tom Bar	May 31 - Sept 30	Oct 1 - May 30
Main Salmon River above Long Tom Bar		Entire Year
Tributaries to Salmon River		Entire Year
Weiser River Drainage		
Weiser River & tribs mouth		
to Little Weiser	July 1 - Sept 30	Oct 1 - June 30
Weiser River upstream from		
mouth of Little Weiser		Entire year
Manns Creek upstream		
from res.		Entire year
(Cambridge upstream) & tribs.	July 1 - Sept 30	Oct 1 - June 30
Little Weiser & tribs. Greys		
Creek upstream	July 1 - Sept 30	Oct 1 - June 30
Little Weiser upstream of Anderson Creek		Entire year
Anderson Creek & tribs		Entire year
Sheep Creek & tribs		Entire year
Dewey Creek & tribs	July 1 - Aug 15	
Sage Creek & tribs.	July 1 - Sept 30	Oct 1 - June 30
Goodrich Creek & tribs.	July 1 - Sept 30	Oct 1 - June 30
Hornet Creek & tribs		Entire year
E.F. Weiser River & tribs		Entire year
Payette River Drainage		
N.F. Payette River & tribs. Cabarton		
Bridge to Big Payette Lake	Jan 1 - Dec 31	
Lake Fork Creek & tribs		Entire year
Kennally Creek & tribs		Entire year
Gold Fork Creek & tribs		Entire year

Table C-1	**OPEN**	**CLOSED**
South Fork Payette River M.F. to		
the confluence with Big Pine Creek		
(NE1/4 SW1/4, Sec. 33,		
T09N, R6E, B.M.)	July 1 - Sept 30	Oct 1 - June 30
S.F. Payette River from the		
confluence with Deadwood River		
to Five Mile Creek	July 1 - Sept 30	Oct 1 - June 30
S.F. Payette River upstream		
from Five Mile Creek		Entire year
M.F. Payette River mouth & tribs		
upstream to Wet Foot Creek (Sec 28)	July 1 - Sept 30	Oct 1 - June 30
M.F. Payette & tribs upstream Wet Foot Creek	Entire year	
Boise River Drainage		
Boise River below Star Highway Bridge	Jan 1 - Dec 31	
Middle Fork Boise River from Arrowrock		
Res. Upstream to the SNRA		
boundary below Leggitt Cr.	July 1 - Sept 30	Oct 1 - June 30
Middle Fork Boise River from the mouth		
of Roaring River to the confluence		
with the North Fork of the Boise River		Entire year
Mores Creek & tribs down stream		
of Boulder Creek	July 1 - Sept 30	Oct 1 - June 30
Mores Creek & tribs		
upstream of Boulder Creek		Entire year
Elk Creek & Tribs. Mouth		
to Eldorado Gulch		Entire year
Elk Creek & tribs above		
Eldorado Gulch	July 1 - Sept 30	Oct 1 - June 30
Grimes Creek & tribs.	Jan 1 - Dec 31	
South Fork Boise River Pine		
Bridge up stream to Barker Gulch	July 1 - Aug 20	Aug 21 - June 30
Yuba River & tribs		Entire year
Queens River & tribs		Entire year
Black Warrior Creek & tribs		Entire year
Granite Creek	July 1 - Sept 30	Oct 1 - June 30
Buck Creek & tribs		Entire year
Owyhee River Drainage		
Jordan Creek above Williams Creek	Jan 1 - Dec 31	
Bruneau River Drainage		
Bruneau River & tributaries below Hot Creek	July 1 - Sept 10	Sept 11 - June 30

Table C-1	OPEN	CLOSED
Malad-Wood River Drainage		Entire Year
Big Lost River Drainage		Entire Year
Salmon Falls Creek Drainage		
Salmon Falls Creek & tribs.	July 1 - Sept 10	Sept 11 - June 30
All other streams & tribs.	July 1 - Sept 10	Sept 11 - June 30
Hot Creek & tribs. Nevada line to mouth		Entire year
Goose Creek Drainage		Entire Year
Raft River Drainage		
Raft River	July 1 - Sept 10	Sept 11 - June 30
All other streams & tribs.	July 1 - Sept 10	Sept 11 - June 30
Blackfoot River Drainage		
Blackfoot River Trail Cr. Bridge		
to Blackfoot Dam	July 1 - Nov 30	Dec 1 - June 30
Snake River Drainage		
Wild Horse	July 1 - Aug 15	Aug 16 - June 30
Indian Creek	July 1 - Aug 15	Aug 16 - June 30
Snake River from eastern Boundary		
of T6S, R8E to King Hill	Jan 1 - Dec 31	
Little Canyon Creek & tributaries		
upstream 4 mi. from mouth	July 1 - Mar 1	Mar 2 - June 30
King Hill Creek & tributaries		
mouth upstream for 4 miles	July 1 - Sep 10	Sep 11 - June 30
100 feet below Murtugh Bridge to		
100 feet above the Hansen Bridge.		Entire year
Snake River from King Hill to Milner Dam		
(except 100 feet below Murtugh Bridge		
to 100 feet above Hansen Bridge)	July 1 - Oct 31	Nov 1 - June 30
Snake River from Milner Dam to		
Massacre Rock State Park	July 1 - Oct 31	Nov 1 - June 30
Deep Creek	Aug 1 - Mar 1	Mar 2 - July 31
Mud Creek	Aug 1 - Mar 1	Mar 2 - July 31
Cedar Draw Creek	Aug 1 - Mar 1	Mar 2 - July 31
Rock Creek & tribs.	Aug 1 - Mar 1	Mar 2 - July 31
McMullen Creek	Aug 1 - Mar 1	Mar 2 - July 31
Snake River Massacre Rock State		
Park to confluence of Henry's Fork	June 15 - Nov 30	Dec 1 - June 14
Willow Creek & tribs.	Feb 1 - May 1	May 2 - Jan 31
Grays Lake Outlet upstream		
from Homer Creek	Feb 1 - May 1	May 2 - Jan 31

Table C-1	**OPEN**	**CLOSED**
Lava Creek	Sept 1 - May 1	May 2 - Aug 31
Falls River & tribs	Sept 1 - May 1	May 2 - Aug 31
Teton River & tribs	Sept 1 - May 1	May 2 - Aug 31
Moose Creek	Aug 1 - Aug 31	Sep 1- July 31
McCoy Creek headwaters to Fish Cr	Sept 15 - Nov 30	Dec 1 - Sept 14
Tributaries to McCoy Cr. (City Cr.,		
Camp Cr., Miners Delight Cr., Barns Cr.,		
Iowa Cr., Anderson Cr., and Bilk Cr.)	Sept 15 - Nov 30	Dec 1 - Sep 14
Tin Cup Creek & tribs		Entire year
Bear River Drainage		
Montpelier Creek	July 1 - Nov 30	Dec 1 - June 30
Georgetown Creek	July 1 - Nov 30	Dec 1 - June 30
Eight Mile Creek	July 1 - Nov 30	Dec 1 - June 30
Cottonwood Creek	July 1 - Nov 30	Dec 1 - June 30
Mink Creek	July 1 - Nov 30	Dec 1 - June 30
Cub Creek	July 1 - Nov 30	Dec 1 - June 30
Malad River Drainage (Oneida County)		Entire Year

Appendix D
CWA § 401 Certification

Idaho Department of Environmental Quality
DRAFT §401 Water Quality Certification

November 13, 2009

NPDES Permit Number: IDG370000 – General Permit for Small Placer Miners in Idaho

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC Section 1341 (a)(1), and Idaho Code §§ 39-101 et.seq., and 39-3601 et.seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NDPES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, including the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) and other appropriate water quality requirements of State law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

CONDITIONS THAT ARE NECESSARY TO ASSURE COMPLIANCE WITH WATER QUALITY STANDARDS OR OTHER APPROPRIATE WATER QUALITY REQUIREMENTS OF STATE LAW

Fish Passage
The permittee shall ensure there is adequate passage for fish around and through the mining area at all times (IDAPA 58.01.02.050.02; IDAPA 58.01.02.080.01).

Invasive Species
Pursuant to IDAPA 02.06.09, operators must ensure their dredging equipment does not house invasive species. Equipment must be decontaminated prior to its placement in waters of the state. Furthermore, dredging equipment used in multiple streams should be decontaminated before each deployment. Decontamination procedures may be found at:
http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/decontamination_procedures.pdf

Stream Banks
Dredging stream banks is not authorized. Removal or disturbance of boulders (cobbles or large rock) or any type of vegetation (alive or dead) on the stream bank, leading to erosion or undercutting of the banks is prohibited (IDAPA 58.01.02.050.02; IDAPA 37.03.07.064.04).

Mechanized Equipment
Mechanized equipment, with the exception of the suction dredge itself and any life support system necessary to operate the dredge, shall not be used below the mean high water mark (IDAPA 37.03.07.064.03).

Hazardous and Deleterious Material Storage
Hazardous and deleterious materials must not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to ensure that those materials will not enter state waters as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities (IDAPA 58.01.02.800).

Reporting of Discharges Containing Hazardous Materials or Petroleum Products
Discharges of oil, grease, fuel, or other hazardous materials as a result of the dredging activity must be reported in accordance with this condition. Equipment used for suction dredging must be in proper working condition and shall not leak petroleum products. The permittee must check the equipment for fuel and oil leaks daily prior to operation.

If a spill of hazardous materials or petroleum products occurs, the permittee must stop, contain, remove, and mitigate the spill(s) immediately. Spilled material must be disposed of properly. Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office (Table 1). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if cleanup cannot be accomplished within 24-hours (IDAPA 58.01.02.850 and IDAPA 58.01.02.851.04).

Table 1. DEQ mailing addresses and telephone contact for reporting spills.

Boise Regional Office 1445 N. Orchard Boise, ID 83706 (208) 373-0550	**Lewiston Regional Office** 1118 "F" Street Lewiston, ID 83501 (208) 799-4370
Coeur d'Alene Regional Office 2110 Ironwood Parkway Coeur d'Alene, ID 83814 (208) 769-1422	**Pocatello Regional Office** 444 Hospital Way #300 Pocatello, ID 83201 (208) 236-6160
Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls, ID 83402 (208) 528-2650	**Twin Falls Regional Office** 1363 Fillmore St. Twin Falls, ID 83301 (208) 736-2190
State Office 1410 N. Hilton Boise, ID 83706	

Outside of regular business hours, qualified spills (e.g. spills of hazardous materials or spills of petroleum products that exceed 25 gallons or that cause a visible sheen) should be reported to the State Communications Center (800-632-8000 or 208-846-7610).

Notification and Reporting Requirements
Copies of the Notice of Intent for coverage under the general permit and the annual report shall be submitted to the water quality managers at the DEQ State and appropriate regional offices (Table 1). Similarly, EPA shall send copes of the permit authorization letters to DEQ.

Stream Channel Alteration Permit Requirements
Pursuant to IDAPA 37.03.07, operators must also obtain a recreational dredging permit from the Idaho Department of Water Resources. A permit application may be obtained from the following web page:
http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/DredgingPermit/DredgingPermit.htm.

MIXING ZONE
Pursuant to IDAPA 58.01.02.060, DEQ authorizes the use of a mixing zone that extends 500 lineal feet downstream of the discharge. There shall be no observable turbidity plume extending beyond the limits of the mixing zone.

ALTERNATIVE LIMITATIONS
The following subsection(s) discuss how the permit can be made less stringent and still comply with Idaho WQS or other appropriate water quality requirements of state law.

Distance Between Suction Dredge Operations
The draft permit indicates that suction dredges shall not operate within 800 feet of another active suction dredge operation or a location where suction dredging occurred within the past month. The permit can specify a distance of 100 linear feet of stream between active suction dredge operations and comply with IDAPA 37.03.07.064.07.

OTHER CONDITIONS
The certification is conditioned upon the requirement that any material modification of this permit or the permitted activities including without limitation, any modifications of the permit to reflect new or modified TMDL waste load allocations or other new information, shall first be provided to DEQ for review to determine compliance with WQS and to provide additional certification pursuant to section 401.

RIGHT TO APPEAL FINAL CERTIFICATION
The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5), and the Rules of Administrative Procedure Before the Board of Environmental Quality, IDAPA 58.01.23, within 35 days of the date of the final certification.

Questions regarding the actions taken in this certification should be directed to Johnna Sandow, at (208) 373-0163 or at Johnna.Sandow@deq.idaho.gov.

Barry N. Burnell
Administrator
DEQ Water Quality Division