

**Department of Environmental Conservation
Response to Comments
for**

**Bonanza Channel Placer Dredging
by
IPOP, LLC
APDES Permit No. AK0062295**

Public Noticed June 28, 2024 – August 5, 2024



October 10, 2024

Summary of Facility / Permit

The Bonanza Channel Placer Project is located approximately 28 road miles east of Nome along the Nome-Council Highway in the Bonanza Channel. IPOP claims and operations are protected from the Bering Sea by an approximate ½ mile-wide southern boundary barrier island traversed by the Nome-Council Highway. On the north side of the Bonanza Channel are uplands of the coastal plain.

The IPOP LLC facility consists of a floating mining operation that will dredge for placer gold in the sediments of the Bonanza Channel. The project consists of a four-trailer mobile camp (to house workers) that will be parked on lands owned by the State of Alaska adjacent to the Nome-Council Highway. Mining equipment includes two small tender boats 25 feet (ft.) long or less, a cutterhead dredge (designed to operate in shallow waters), and a processing barge (designed to capture very fine gold particles). The project will operate seasonally during the summer and early fall in the waters of Bonanza Channel.

The area of dredge operation and the silt curtain containment system are authorized under a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA), Section 404, Individual Permit (POA-2018-00123) and associated CWA, Section 401 Certification issued by the Alaska Department of Environmental Conservation (DEC or department). Permit coverage under POA-2018-00123 includes all discharges within the silt curtain containment system and discharges that are incidental to the movement of the silt curtain containment system.

The proposed DEC permit (AK0062295) authorizes the discharge of wastewater to the Bonanza Channel from Outfall 001 which is the double doorway opening of the silt curtain containment system surrounding the mining operation and through which the dredge and other support craft may pass. The discharge from Outfall 001 consists of wastewater containing suspended particulates created during dredging and gold recovery operations and other activities disturbing the substrate within the silt curtain. The pollutants of concern are turbidity and suspended solids which are authorized to exceed water quality criteria within a 100-ft. radius mixing zone centered on Outfall 001.

The permit also designates the water in the silt curtain containment system required under POA-2018-00123, as a “treatment works.” In Alaska Statutes (AS) 46.03.900(33), treatment works are defined as “works installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage, industrial waste, or other wastes.” Under 18 AAC 70.010(c), Water Quality Standards (WQS) do not apply to a treatment works authorized by the department, and applicable water quality criteria “must be met in adjacent surface water and groundwater at and beyond the boundary of the treatment works.” The Section 401 Certification requires the permittee to comply with all stipulations in POA-2018-00123 and ensures that all wastewater and tailings are deposited in a manner that will not damage or otherwise jeopardize the integrity of silt curtain containment system.

Opportunity for Public Participation

The department issues an Alaska Pollutant Discharge Elimination System (APDES) individual permit to IPOP, LLC. To ensure public, agency, and tribal notification and opportunities for participation, the department:

- Identified the permit via online posting on the DEC Wastewater Permit Issuance Plan website at: [Permit Issuance Plan \(alaska.gov\)](https://alaska.gov/dec/permit-issuance-plan);
- Notified potentially affected tribes and local governments and other agencies on May 6, 2024, that the department would be working on this permit via letter, fax and/or email;
- Held informational teleconference meetings with representatives of the Village of Solomon on June 28, 2024, and August 1, 2024.
- Published a public notice in Anchorage Daily News on Friday, June 28, 2024, and in the Nome Nugget newspaper on Thursday, July 4, 2024;
- Posted a public notice of the draft permit documents on the department’s public notice webpage and notified tribes, local governments, and other agencies; and
- Sent email notifications via the APDES Program List Serve when the draft, and proposed final permits were available for review.

Public Comments

The department received comments from 33 individuals representing the following parties on the draft permit.

- Individual residents of Nome, Anchorage, Fairbanks, Alaska; Colorado Springs, Colorado; Portland, Oregon; and Cibola, Arizona.
- Audubon Alaska
- City of Nome, Mayor’s Office
- Environmental Protection Agency (EPA)
- IPOP, LLC
- Kawerak, Inc.
- MK Properties, Nome-based business
- National Oceanic and Atmospheric Administration (NOAA)
- Norton Sound Economic Development Corporation (NSECD)
- RoamNome, Nome-based business
- University of Alaska Fairbanks, Nome Campus
- Village of Solomon

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments. Substantive comments requiring explanation or comments that have resulted in changes to the permit and/or fact sheet are explained in the pages in the Comments & Responses section. Generalized comments of overall support or opposition to the project and non-substantive corrections to the permit and fact sheet are not included in this document.

Request for Public Hearing

The Division of Water (division) received numerous comments which contained a request for a public hearing submitted during the public comment period. Based on written comments and

telephone conversations, the division observed a recurring request to have dialogue and answer questions on the proposed permit. Since public hearings only record spoken testimony and offer no opportunity to respond to questions, the division opted to conduct a public informational meeting on August 1, 2024, for over two hours. During the public informational meeting, division permitting staff and leadership were available answering questions pertinent to the draft permit on public notice. Many of the comments and questions were beyond the scope of the draft permit and related to other authorizations of the IPOP operation. Additionally, the division conducted an informational meeting with the Village of Solomon on June 28, 2024. Given the comments received during both informational meetings and submitted in writing and consistent with 18 AAC 83.120(I), the division found a public hearing to be unwarranted.

Five-Day Applicant Review

The department provided the applicant with a five-day review of the proposed final versions of the permit, fact sheet and response to comments beginning on September 30 and ending on October 7, 2024. A comment was received from the applicant requesting a modification to the proposed final permit at section 1.3.4 from: *“The silt curtain containment system may not obstruct more than one-half of the deepest portion of the undisturbed channel at any time in order to maintain adequate passage for fish migration”*; to: *“The silt curtain containment system may not obstruct more than one-half of the undisturbed channel at any time in order to maintain adequate passage for fish migration.”* The stipulation of permit section 1.3.4 was developed at the request of the Alaska Department of Fish and Game (ADF&G) to address potential fish migration concerns through the channel during operation. Upon consultation with ADF&G, the department confirmed that the modification acceptably addresses potential habitat concerns, and permit condition 1.3.4 was modified as requested.

Final Permit

The final permit was issued by the department on October 10, 2024. Significant issues are identified in the response to comments and have been addressed in the final permit and fact sheet.

Comments & Responses

Comment #1: Environmental Concerns

A majority of comments expressed concerns relating to the environmental effect of the project on the Bonanza Channel and surrounding habitat. Environmental concerns are summarized and listed below:

- The baseline water quality data provided by the project proponent is inadequate.
- The discharge of pollutants and sediments could negatively affect designated Essential Fish Habitat, such as eelgrass beds, which are critical for fish propagation and overall ecosystem health. Eelgrass is an important species with low tolerance for turbidity, which is crucial for the local marine ecosystem.
- The proposed use of silt curtains in a storm-prone area is untested, and there is skepticism about their effectiveness in preventing sediment release. There are concerns about increased turbidity in the water resulting from the mining operations, particularly from the dredging and silt curtain activities.
- The project is likely to have cumulative adverse effects on the environment, including the disruption of wildlife habitats and the resuspension of toxic substances, which have not been adequately addressed. The potential for the mining activities to introduce toxic heavy metals (e.g., arsenic, mercury, copper, lead) into the water through sediment disturbance. This could degrade water quality and harm fish, wildlife, and human health.

Response #1: Environmental Concerns

The environmental concerns echoed sentiments raised during the public participation process of POA-2018-00123, issued on March 20, 2024. Permit coverage under POA-2018-00123 allows the following activities within the project area of Bonanza Channel:

- Constructing structures and/or conducting work in or affecting "navigable waters of the United States" pursuant to Section 10 of the Rivers and Harbors Act of 1899;
- Discharging fill into 159.4 acres of waters of the U.S. pursuant to Section 404 of the Clean Water Act of 1972, in association with the Bonanza Channel Placer Project;
- Conducting dredging activity, reclamation of dredged materials, and disposal of excess dredged materials within jurisdictional waters, limited to a total maximum area of 159.4 acres;
- Conducting a multi-year phased dredging project associated with a placer gold mining operation within Bonanza Channel estuary to be implemented over a five-year period;
- Disposing of approximately 4.5 million cubic yards of processed materials from gold extraction and concurrently reclaiming the dredged channel to its original bathymetry and disposing of the excess processed materials at locations adjacent to the dredged area (No chemical processing of dredged materials shall occur);
- Constructing a launch ramp, a man camp (temporary encampment for use by workers), and a staging area (The man camp and staging area shall not be located within jurisdictional waters);
- Restricting operation to ice-free periods when the channel can be accessed by dredging equipment (approximately June 1st through November 1st annually depending on weather)

- at the end of the operational season, the permittee shall shut down ceasing operations and securing the man camp until the following operational season;
- Constructing and maintaining access channels during dredging operations;
- Approving equipment proposed for the project including
 - a cutterhead dredge vessel,
 - two small tender boats, and
 - processing barge connected to the dredge vessel by floating pipe;
- Requiring reclamation of the dredged areas with processed dredged materials (after gold extraction);
- POA-2018-00123, Special Condition 4 requires compliance with CWA, Section 401 Certification dated April 6, 2022; and
- POA-2018-00123, Special Condition 6 requires the deployment and maintenance of a turbidity curtain before and during operations, as provided in the plan of operations.

Since POA-2018-0123 authorizes activities causing exceedance of WQS, the State designated the water bound by the silt curtain containment system of POA-2018-00123, as a “treatment works.” In AS 46.03.900(33), treatment works are defined as “works installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage, industrial waste, or other wastes.” Under 18 AAC 70.010(c), Water Quality Standards (WQS) do not apply to a treatment works authorized by the department, and applicable water quality criteria “must be met in adjacent surface water and groundwater at and beyond the boundary of the treatment works.”

Coverage of APDES Permit AK0062295 does not overlap with the coverage area approved by POA-2018-00123, and WQS are not applicable within the area authorized for dredging and disposal under the USACE permit. The jurisdiction of the APDES Permit AK0062295 is very narrow compared to the USACE permit, and it is limited to the protection of waters exterior of the silt curtain containment system. Therefore, the comments that speak to broader concerns of the impact of the entire operation to the Bonanza Channel are beyond the scope of this permit. The scope of APDES Permit AK0062295 focuses on the discharge of wastewater from Outfall 001 resulting from a vessel passing through the double door access in the silt curtain containment system, and the USACE permit focuses on containment or water within the silt curtain.

No changes were made to the permit or fact sheet because of these comments.

Comment #2: Cultural and Subsistence Resources

Many comments expressed concern with the cultural and subsistence resource effect of the project operation to the Bonanza Channel area which are summarized below.

- The project could impact Native allotments and campsites that have been used for generations, with reports of trespassing by IPOP.
- IPOP has not adequately addressed concerns about the project’s impact on subsistence activities, including the migration and availability of fish.
- The project potentially violates state and federal laws that prioritize subsistence uses of fish and wildlife for rural Alaskan residents.
- The project threatens to disrupt traditional cultural practices, including hunting, fishing, and gathering, which are central to the community’s identity.

- The project could negatively affect bird-watching and related tourism, which are important economic activities in the area.
- The project could undo years of investment in restoring salmon runs, essential for the local community's subsistence and cultural practices.

Response #2: Cultural and Subsistence Resources

See Response #1 for an explanation of how this permit's scope and coverage contrasts with that of the USACE permit.

Additionally, the department's permit, AK0062295, is based on distinctly different statutes and regulations from the USACE permit, POA-2018-00123. The DEC permit is issued under CWA, Section 402. Whereas POA-2018-00123 is issued under CWA, Section 404. These two permits are separate decisions under separate obligations, authorities, and regulations. The APDES Permit AK0062295 considers comments regarding how the specific permitted activity affects the local population based on factual information that is directly related to the proposed discharge. Specifically, the antidegradation analysis in Section 7.0 of the fact sheet is required for authorizing the discharge from the double doorway of the silt curtain containment system into waters of the U.S. The antidegradation analysis concluded that operation of IPOP's Bonanza Channel placer dredge, the wastewater treatment system, and associated discharges authorized by the permit demonstrate that a lowering of water quality, specified by the permit, accommodates important economic development.

The permit's effluent limits satisfy WQS, protect water quality preserving designated and existing uses, and treat and control discharges by the most effective and reasonable means meeting the highest statutory and regulatory requirements.

No changes to the permit or fact sheet were made because of these comments.

Comment #3: Lack of Public Participation

There were comments noting a lack of public participation in the permitting process. Public participation comments are summarized as follows:

- There was insufficient public notice and a lack of response to requests for a public hearing, which undermines the community's right to be involved in decisions affecting their environment;
- IPOP's suggested alternate sites for subsistence activities were inadequate and dismissive; and
- The project's lack of transparency, particularly in disclosing information and responding to public concerns, has led to a lack of trust in the process.

Response #3: Lack of Public Participation

The summary of the public participation steps completed for this permit is outlined above in the "Opportunity for Public Participation" section of this document. The public participation process for this permit followed the Draft Permit and Public Participation requirements of Section 6.2.4 of the [APDES Program Description](#), an EPA-approved plan.

No changes to the permit or fact sheet were made because of these comments.

Comment #4

EPA recommended the following permit changes:

- 1) The silt curtains should be removed as soon as turbidity levels have been fully mitigated;
- 2) Silt curtains should be maintained until turbidity is reduced to background levels; and
- 3) The 100-ft. mixing zone should be removed from the permit.

Response #4

The first and second comments are addressed as a part of the silt curtain management plan. In condition 1.2.3, the permit adopts by reference the silt curtain management plan referenced in POA-2018-0123, which requires the silt curtain containment system during the term of the five-year project. The objective of the silt curtain management plan is prevention of turbidity and settleable solids pollution stemming from the activities permitted under POA-2018-00123, and it includes prohibition of active dredging while the silt curtain is advanced to a new area.

Regarding the comment that the mixing zone should be removed from the permit, the department considered the likely discharges from the silt curtain containment system and determined that the movement of equipment to and from the containment system through the double doorway could reasonably cause an exceedance of WQS for turbidity and settleable solids. In addition, the Section 401 Certification requires the permittee to comply with all stipulations in POA-2018-00123, and it requires a Section 402 permit for discharges of wastewater from dredging and related activities from point-source discharge(s) into waters of the U.S.

No changes to the permit or fact sheet were made because of these comments.

Comment #5

To more accurately measure turbidity impacts of the mining activity, EPA recommends two changes:

1. Turbidity should be monitored at two locations: (a) one upstream of the barge and silt curtain, and (b) one downstream of the silt curtain doorway. The addition of the upstream location will allow the facility to more accurately determine the background turbidity level in Bonanza Channel, so that it can be compared with the downstream location to determine whether the activity causes an increase in turbidity outside of the silt curtain. Upstream monitoring will help to assess turbidity impacts if there is lasting elevated turbidity from one door opening event to another, or any escapement from the silt curtain.
2. The proposed permit requires downstream compliance samples to be taken 100 feet from the silt curtain doorway “as soon as practicable” after it is closed. The EPA recommends that DEC establish a monitoring requirement that is based on the amount of time it would take for a turbidity plume to reach the monitoring location.

The EPA recommends considering additional downstream compliance sampling locations, particularly if the first sample indicates elevated turbidity, in order to determine how far downstream there are exceedances of background turbidity.

Response #5

The department appreciates these suggestions and has modified permit condition 1.5.2 to include an upstream monitoring location as recommended. In addition, permit conditions 1.5.3 and 1.5.4 were revised to limit the maximum time between the doorway breach and taking the samples to be no greater than 30 minutes.

Comment #6

The EPA recommends including the following BMPs:

1. If initial sampling indicates elevated turbidity outside the silt curtain, a secondary silt curtain should be used, and one doorway should be closed before another is opened. This will prevent unintended release of particulates.
2. The silt curtain doorway should be opened facing upstream, so that any current pushes sediment into the containment area rather than out of it. This will also minimize the release of sediments that may build up behind the silt curtain.

Response #6

The silt curtain containment system includes constructing a double doorway that allows for particulates in the water to settle while in containment between the main silt curtain containment system and the Bonanza Channel. See APDES permit Figure 3. According to the silt curtain management plan, the doorway to Bonanza Channel will not open until turbidity has settled. No change to the permit was made as a result of this comment.

The permit does not specify the position of the silt curtain doorway because the placement of the doorway will change, and its location is largely dependent on channel geometry and the location of the project at the time of development. Since the suggestion regarding doorway placement has merit, it was added as a consideration into permit condition 1.3.6.

Comment #7

The Village of Solomon cites permit condition 1.5.2 as deficient for not considering best sampling protocols.

Response #7

This general comment lacks reference to specific permit flaws. See comment #5 above, for an example of a specific comment. However, sampling protocols and procedures are covered by the quality assurance project plan (QAPP). Permit condition 3.2 requires the permittee to submit an updated QAPP adhering to *EPA Requirements for Quality Assurance Project Plans* within 60 days of the permit effective date.

No changes to the permit or fact sheet were made because of these comments.

Comment #8

The Village of Solomon is concerned that the silt curtain will not contain sediments.

Response #8

The USACE permit requires containment of sediments through installation, use, and maintenance of the silt curtain containment system. The department recognizes that access to and from the silt curtain containment is necessary, and the APDES permit focuses on escapement

from the double doorway during those times. Otherwise, containment and performance of the silt curtain is covered by the USACE permit.

No changes to the permit or fact sheet were made because of these comments.

Comment #9

The Village of Solomon recommends that pre-mining background sampling occur.

Response #9

The department understands that turbidity, including Bonanza Channel, varies temporally based a variety of factors among which is weather. The permit requires sampling that is representative of background water quality prior to discharge. Permit condition 1.5.2 states that the background sampling occur, “just prior to the silt curtain containment system doorway breach.” Pre-mining background sampling does not apply to turbidity because it is a transient pollutant generated by physical activity, unlike a water quality parameter that is conservative and enduring such as metals concentrations, which benefit from a background perspective.

No changes to the permit or fact sheet were made because of these comments.

Comment #10

The Village of Solomon points out that condition 1.5.4 is inconsistent requiring settleable solid sampling at two different locations.

Response #10

Condition 1.5.4 of the permit has been changed and now requires settleable solids sampling only at the same approximate location as turbidity compliance sampling.

Comment #11

The Village of Solomon is concerned that the permit fails to satisfy the antidegradation policy in 18 AAC 70.015.

Response #11

This general comment lacks specific reference to the permit. As of April 6, 2018, *18 AAC 70.016. Antidegradation implementation methods for discharges under the federal Clean Water Act* came into effect. Fact sheet section 7.0 *Antidegradation* explains how the permit satisfies the department’s antidegradation policy through implementing methods required by 18 AAC 70.016.

No changes to the permit or fact sheet were made because of these comments.

Comment #12

The Village of Solomon is concerned that not all applicable Water Quality Standards (WQS) were considered.

Response #12

The department employs a rational regulatory scheme in protecting the State's water quality. The first step in that process involves establishing protective standards, WQS, as mandated by law, Alaska Statutes 46.03, and regulation, 18 AAC 70 (WQS). Next, the department must document a basis for concern regarding water quality. For a given permit, constituents of concerns are determined and applied. Given decades of experience permitting and regulating placer dredging, the constituents of concern regarding this category of industrial activity are well understood, and the permit employs clear, consistent, and responsible authority in protecting the waters of the U.S. through its application of WQS.

No changes to the permit or fact sheet were made because of these comments.

Comment #13

The Village of Solomon believes that the department should not allow a mixing zone for turbidity.

Response #13

This general comment lacks reference to specifics of the permit. The permittee provided all information required for authorization of the mixing zone in this permit, and the turbidity mixing zone was issued according to regulation 18 AAC 70.240. See section 5.3 of the fact sheet.

No changes to the permit or fact sheet were made because of these comments.