



REGION 10
SEATTLE, WA 98101

May 13, 2024

Jason Brune
Director of Environmental Management
North Slope Borough
P.O. Box 350
Utqiagvik, AK 99723

RE: Proposed language for the Nuiqsut Community Closure Plan Addendum and Modifications

Dear Mr. Brune:

As discussed at our meeting on April 22, 2024, please find EPA's draft proposed language for the Nuiqsut Community Closure Plan Addendum (Addendum). EPA's approval of the Nuiqsut Community Closure Plan (Closure Plan) is conditioned upon the North Slope Borough's (NSB's) incorporation of the following comments and providing responses to EPA's questions in an Addendum. It is critical that NSB work with EPA to finalize the Addendum, so that NSB can complete field work in Nuiqsut this summer. EPA intends to share the finalized Addendum along with the Closure Plan during the required 30-day public comment period per 40 C.F.R. § 265.112(d)(4). This decision was based on information provided by NSB and its contractors. If new or additional information comes to light, EPA retains the right to request additional work. In addition, sampling, analysis, and field screening comments on the Closure Plan must be responded to adequately, and NSB must provide an answer for each remaining comment on the attached table titled "*North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications.*"

- 1. RCRA IDs** – The current RCRA ID numbers for NSB does not comport with 40 C.F.R. § 260.10. The Closure Plan Addendum must include updated RCRA IDs for all Nuiqsut non-contiguous facilities that are subject to closure under the Consent Decree.

NSB must provide correct RCRA ID numbers information in their response to the letter.

- 2. Section 1.6.2 Sampling Protocol and Closure Performance Standards** - NSB added Tables 1-3 and 1-4 listing analytical methods to be used for each analyte in addition to descriptions of decontamination processes. EPA's approval will require NSB to use the

most current methodologies specified in the most updated EPA hazardous waste test method/ SW-846. The closure plan addendum will need to update methods in Table 1-3 from SW8270D to SW8270E and from SW8082 to SW8082A, and in Table 1-4 from SW6020 to SW6020B. Please make these updates to the corresponding tables in the QAPP. In addition, please make sure that the soil closure performance standard for chromium in Table 1-4 is speciated chromium (III) and (VI). Update the closure performance standards to match the 18 AAC 75 Method 2 chromium cleanup levels based on speciation. In addition, please check Tables 1-3 and 1-4 and update the closure plan addendum to include all hazardous substances under 18 AAC 75 or provide justification why these hazardous substances are not included in analyses.

EPA's Proposed language:

"The Borough added Tables 1-3 and 1-4 listing analytical methods to be used for each analyte in addition to descriptions of decontamination processes. The Borough will use the most current methodologies specified in the most updated EPA hazardous waste test method/ SW-846. The Borough will update methods in Table 1-3 from SW8270D to SW8270E and from SW8082 to SW8082A, and in Table 1-4 from SW6020 to SW6020B."

3. **Section 1.2 Community Description and Regional Features and Section 3.3.2.1 Waste Characterization** - Multiple listed hazardous waste codes were provided in the closure plan (e.g., F005 on page 3-5 and U154 in Section 1.2) but it is unclear how NSB made listed waste determinations without providing any background information on how the hazardous waste was generated, where it was generated/stored, as well as the quantity of listed waste. Provide HWMU(s) where the listed waste is stored and quantity of waste. Additionally, NSB must insert table(s) in the Closure Plan Addendum to clarify which waste codes correspond with each HWMU. Lastly, NSB must provide their methods for identifying listed wastes.
4. **Section 3.3.1 Notification** - The notification request pertaining to new contamination and spills was added but has no reference to a timeline when notification and method of notification was provided.

EPA's Proposed Language:

"The Borough will comply with all applicable portions of 40 C.F.R. § 262.17 and any applicable state regulations. The Nuiqsut Closure Report will document the exact types and quantities of waste encountered during closure."

5. **Section 3.3.2.1 Waste Characterization** - If NSB cannot determine the ignitability/corrosivity/reactivity of waste by a method identified in 40 C.F.R. § 261.21-261.23, then NSB must update the Closure Plan Addendum to follow the tests in the

First Step Hazard Categorization provided by EPA or an equivalent guidance to determine ignitability/corrosivity/reactivity characteristic waste approved by EPA. This is being shared for awareness of the methods EPA employs only, and there is still a training/capabilities question with whomever will be performing the tests. EPA does typically share these materials with EPA's HazMat team partners, but that is in conjunction with a provided eight-hour training. This guidance is not sufficient training for performing these tests and following it does not imply an endorsement. Section 3.3.2.1 does not provide enough information to indicate that NSB's field characterization will not present an unreasonable risk to human health and the environment.

6. **Section 3.3.5.4 Groundwater Sampling** – If soil samples are above the closure performance standards, the Borough will need to submit a Post-Closure Plan for subsequent groundwater evaluation.

EPA's Proposed Language:

“The Nuiqsut Community Closure Plan, Section 3.3.6.4 Groundwater Sampling, states that groundwater sampling will be performed in the summer of 2025 if soil sampling results exceed the closure performance standards. Soil cleanup levels based on Method Two in the DEC Procedures for Calculating Cleanup Levels, (DEC 2018) and for the Arctic Zone will be used for the soil closure performance standard (Table 1-4). The closure performance standard for lead will be 200 parts per million, based on EPA's Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action memorandum (EPA 2024a).”

“If soil sampling results exceed the closure performance standards, then the HWMU is not able to be clean closed. If HWMUs cannot be closed according to closure performance standards, then the North Slope Borough will submit a Post-Closure Plan to EPA describing the subsequent monitoring to be performed and the institutional controls to be put in place to protect the public.”

7. **Section 3.8 Waste Containers** - The Closure Plan states that it is expected that hazardous wastes will be transported during the winter because there are no roads to Deadhorse in the summer, and there is no contractor on board yet. However, the schedule in Table 5.2 expects all waste to be offsite by August 6, and the Borough is currently moving waste offsite. The Borough needs to explain how and when it plans to transport all hazardous waste from each of the regulated units in Nuiqsut.

EPA's Proposed language:

*“The Borough will transport waste using the following methods:
For hazardous waste removal in the summer season (June through September 2024), NSB's contractor Umiaq will package and prepare the wastes to be flown, barged or driven (if feasible) offsite. The process for packaging, preparing, and*

transporting the waste is: _____. (Please explain the packaging and preparation process for each type of waste and container that will be transported for each of the hazardous waste management units identified in the Closure Plan.) NSB must identify the Treatment, Storage, and Disposal Facility where hazardous waste from the Atqasuk hazardous waste regulated units will be sent along with the timeline for such disposal.

NSB must inform EPA as soon as possible, if the inclusion of any of these comments is problematic. Please reach out to me if you have any questions or would like to schedule a meeting to discuss the Closure Plan Addendum and modifications in more detail.

Sincerely,



Rory O'Rourke
RCRA Project Manager
Land, Chemicals, & Redevelopment Division

Attachment:

1. North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	Auditor Comment (if applicable)	Date of Auditor Comment	NSB Audit Response (if applicable)	Date of NSB Audit Response	NSB Response to Comment	EPA Response to NSB Comment
1	2/12/2024	Multiple	Appendices	This Closure Plan does not provide any hazardous waste codes for waste managed at all Hazardous Waste Management Units (HWMUs). Appendix C, Section 2.0(e) of the Consent Decree (CD) requires all hazardous waste codes for the hazardous waste managed (past and present) at each HWMU. Please provide hazardous waste codes for each HWMU present at all Hazardous Waste Management Facilities (HWMFs).	CD Appendix C, 2.0(e)					Concur. Applicable waste codes have been added to Section 1.2 along with information that generator's knowledge and some analytical data has been used for characterization.	Page 1-5, Paragraph 1. "Consists of the following: D001, D002, D003, D004, and U154". NSB must insert table(s) in the Closure Plan Addendum to clarify which waste codes correspond with each HWMU. Additionally, NSB must provide their methods for identifying listed wastes. U154 listed waste code provided but was no information was provided which HWMU(s) the listed waste is generated and located. Provide HWMU(s) where the listed waste is stored and quantity of waste. Additionally, it is unclear to which exact HWMU(s) each corresponding identified waste code are located.
2	2/12/2024	Multiple	Appendices	There is little to no historical background provided for hazardous and solid waste generation and management within the HWMF and associated HWMUs and Solid Waste Management Units (SWMUs). Appendix C, Section 2.0(d) of the CD requires that historical background be provided for the hazardous waste and solid waste generation and management at the HWMF and each HWMU and SWMU within all HWMFs, the full length of time hazardous waste and solid waste was generated and/or received and managed at each HWMU and SWMU, information regarding any releases, including spills of hazardous waste and solid waste, the last or most recent date when hazardous waste was generated or received at the site, and, if applicable, the date when all stored hazardous waste was removed from the facility. Provide this information within the Closure Plan.	CD Appendix C, 2.0(d)					Concur. Locations of SWMUs within the HWMF are shown on figures, maps and photographs in the appendices. Layouts on the units are shown on figures in the appendices. Dimensions are shown in tables associated with the appendices. Text was added to each appendix detailing information associated waste generation and management, and any spills that occurred for each SWMU.	While it is stated throughout the plan that no historical records are available for review, EPA has located records of waste received from NSB in 2017. Please see these attachments and review any records NSB has to add this historical background for waste on sites within Nuiqsut. If NSB can provide updated information about waste shipments off site since then, this information should be compiled, analyzed, and added to the Closure Plan Addendum.
3	2/12/2024	1-7	1.5	Facility must explicitly define what cleanup levels will be utilized for each HWMU so EPA can identify the cleanup levels are adequate to ensure human health and environment are protected. If NSB means that "clean closure" as using Alaska Department of Environmental Conservation (ADEC) migration to groundwater standards, then it must state as such.	CD Appendix C, 3.1					Concur. Maximum contaminant levels (MCLs) under the Safe Drinking Water Act will be used as the closure performance standard for decontamination waters. Soil cleanup levels for the Arctic Zone from Tables B1 and B2 from 18 AAC 75.341(c) and (d) will be used for the Closure Performance Standard. The closure performance standard for lead in soil will be 200 ppm, based on EPA's January 17, 2024 "Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action" memorandum. These levels have been selected because they are risk-based, established, protective, and (for soils) based on residential land use.	Page 1-8, Bullet #3: It is mentioned that decontamination and confirmation sampling will be repeated until analytical results are no longer above screening levels. Clarify in the Closure Plan Addendum what "screening level" is or change to "no longer above concentrations above the established closure performance standards". This information is not consistent with NSB's response to comment that MCLs will be used as a performance standard for decontamination waters as two different levels are mentioned.
4	3/20/2024	1-8	1.6.2	Section 1.6.2 states that screening levels for PCBs are consistent with 40 CFR 761 Subpart G. However, Subpart G is the PCB Spill Cleanup Policy. This policy is intended for fresh spills of liquid PCBs and only applies to spills less than 72 hours old. Materials contaminated by old spills are considered PCB remediation waste, so please update the reference in this section to "40 CFR § 761.61." Under 761.61, the cleanup level for unrestricted use of non-porous surfaces is ≤10 µg/100 cm ² , so the closure performance standard noted in the text is adequate. Please be advised that wipe sampling is only appropriate for non-porous surfaces, such as metal. For soil, concrete, and other porous surfaces, bulk sampling is required with an unrestricted use cleanup level of ≤1 ppm PCBs. Please update Section 1.6.2 to clarify the appropriate sampling methodology (wipe vs. bulk) for the media you intend to sample.	CD Appendix C, 3.1; 40 CFR § 761.61					Concur. Text reference has been updated from "40 CFR 761 Subpart G" to "40 CFR 761.61." Text has been updated to state the closure performance standard for non-porous surfaces (unrestricted use) to ≤10 µg/100 cm ² and remove references of wipe sampling for porous surfaces. Text has been updated to reflect that for soil, concrete, and other porous surfaces, bulk sampling is required with an unrestricted use cleanup level of ≤1 ppm PCBs.	Page 3-19, Section 3.3.6.3, Paragraph 3: "should analytical results show that PCBs are greater than 50 parts per million..." The unrestricted cleanup level is less than 1 ppm. If the levels are above the unrestricted cleanup level, the HWMF will not be considered "clean closed". Information provided by NSB pertaining additional soil sampling does not support the cleanup standard established in Section 1.6.2. Ceasing further analyses greater than 50 ppm does not address concentrations <50ppm. NSB must adjust this concentration to 1 ppm in the Closure Plan Addendum to be consistent with TSCA and the soil closure performance standard.
5	2/12/2024	1-9	1.7.2	Paragraphs 1 and 2 of Section 1.7.2 state that some HWMUs may not be closed as they are co-located with DEC Contaminated Sites Program (CSP) sites. 40 CFR § 265.111(b) and Section 3.1, Appendix C of the CD, requires that NSB must close the each unit in a manner that controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. ADEC CSP sites that is within HWMUs must also have hazardous waste determinations, and it must be cleaned up as part of the HWMU closure.	CD Appendix C, 3.1 and 3.2					Concur. Text in Section 1.7.3 was updated to state that IDW derived from an ADEC Contaminated Sites Program site that is within the HWMU must also be characterized for RCRA hazardous waste, and it must be cleaned up and disposed of as part of the HWMU closure.	Page 1-21 Section 1.7.2 states "in such cases, the HWMU may not be able to be closed until the contamination is closed." In order to fulfill closure under the CD Paragraph V.E.25, all HWMUs at all HWMFs must be closed in accordance with the established closure performance standard that ensures protection of human health and environment, including the removal of investigation-derived waste that may be present from ADEC cleanup work. This language must be addressed in the Closure Plan Addendum.
6	3/26/2024	3-1	3.2	In accordance with 40 CFR § 265.112(b)(3), CD Appendix C, Section 3.3 requires an estimate of the maximum inventory of Hazardous Wastes ever onsite over the active life of each HWMU with the HWMF. The Nuiqsut Closure Plan provides a method to estimate maximum inventory based on the maximum capacity of facilities observed in 2021 and 2022 only. EPA is aware through conversations with NSB staff that it is possible the inventory has increased since 2022. NSB will be required to confirm the exact inventory once closure is implemented. If NSB is currently aware that capacities have increased, it should inform EPA and include this information in the revised closure plan.	CD Appendix C, Section 3.3; 40 CFR § 265.112(b)(3)					Concur. A statement that "The maximum inventoried waste at the individual Borough HWMFs in Nuiqsut are presented in the appendix associated with each facility." is in Section 3.2 and 3.3.2. This inventory has been added or updated in each appendix. As noted in Section 3.3.2, NSB will confirm the exact inventory for each HWMU once closure is implemented.	Page 3-2, Paragraph 3.3.2.1 " An inventory of wastes present at the HWMU or HWMF at the time the final waste acceptance..." Please ensure that the updated inventory is reflected on the waste estimates of each HWMF and HWMU. Update the closure costs as applicable.

7	2/12/2024	3-2	3.3.1	Paragraph mentions notification procedures required for final closure but does not mention any notification procedures if new contamination and or spills are found beyond what is currently known. Because there are a significant amount of HWMUs with varying types of waste and there is a high degree of uncertainty on where contamination is located, it is necessary for NSB to provide a notification procedure on the discovery of new releases or spills to ensure the criteria for determining the extent of contamination satisfies the requirements of closure performance standards under 40 CFR § 265.111.	CD Appendix C, 3.5; 40 CFR § 265.112(b)(4); 40 CFR § 265.111; 40 CFR § 262.17					Concur. Text has been added.	The notification request pertaining to new contamination and spills was added but has no reference to a timeline when notification and method of notification was provided. The Closure Plan Addendum will be updated to include that the Borough must comply with applicable portions of 40 CFR § 262.17 and any applicable state regulations. The Closure Report must document the exact types and quantities of waste encountered during closure.
8	2/12/2024	3-3	Figure 3-1	Paragraph states that "materials that appear to be fuels/flammables will be labeled and shipped as such". Using appearance as the method to determine if a hazardous waste is ignitable is not an approved method provided in 40 CFR § 261.21. NSB must state which approved testing method they will be using provided in 40 CFR § 261.21.	40 CFR § 261.21					See response to comment 18.	If NSB cannot determine the ignitability/corrosivity/reactivity of waste by a method identified in 40 C.F.R. § 261.21- 261.23, then NSB must update the Closure Plan Addendum to follow the tests in the First Step Hazard Categorization provided by EPA or an equivalent guidance to determine
9	2/12/2024	3-3	Figure 3-1	Paragraph states "integrated PID will be used to record volatile organic vapors emerging from the drum. Mixed materials with high VOC reading will have a flash test performed by transferring a small amount of material to a watch glass, and using a lit match to see if the liquid will flash or sustain a flame" and "if a flash or sustained flame is observed, the substance will be labeled and shipped as ignitable waste." These are not adequate uses and tests for ignitability. 40 CFR § 261.21 provides approved testing methods for determining if a waste is a characteristic waste due to ignitability. ASTM standards are some methods utilized for ignitability testing. If NSB is using an ASTM flash test method, then the selected method must be stated.	40 CFR § 261.21 (a)(1) and (2)					See response to comment 18.	ignitability/corrosivity/reactivity characteristic waste approved by EPA. This is being shared for awareness of the methods EPA employs only, and there is still a training/capabilities question with whomever will be performing the tests. EPA does typically share these materials with EPA's HazMat team partners, but that is in conjunction with a provided 8-hour training. This guidance is not sufficient training for performing these tests and following it does not imply an endorsement. Section 3.3.2.1 does not provide enough information to indicate that NSB's field characterization will not present an unreasonable risk to human health and the environment
10	2/12/2024	3-3	Figure 3-1	Text in box states, "if findings indicate reactivity, an oxidizer test or organic peroxide test will be performed." Please update the Closure Plan to provide the test method to be used to determine if a waste is a characteristic waste due to reactivity.	40 CFR § 261.21 and 23					See response to comment 18.	
11	2/12/2024	3-5	3.3.3	In accordance with 40 CFR § 265.112(b)(3) and CD Appendix C, Section 3.4, the Closure Plan is required to have a detailed description of the methods to be used during closure including but not limited to methods for removing, transporting, treating, storing or disposing of all hazardous wastes. The Closure Plan notes that the Borough does not currently have a contract in place for transportation and disposal, and therefore it does not describe in detail how transportation and disposal will occur. The same regulatory requirements will apply to all contractors, so procedures for transportation and disposal may be reasonably predicted. Provide update the Closure Plan to provide a detailed description of transportation and disposal procedures anticipated to be taken.	CD Appendix C, 3.4; 40 CFR § 265.112(b)(3)					Concur. Text in this section has been updated to include detailed description of transportation and disposal procedures anticipated to be taken.	No action is required to address this item in the addendum. The plan still states that no contract is in place to handle waste. There is a brief description of expected transportation and reference to disposing at a TSDF outside of Alaska but this is not detailed. This topic was discussed at an April 22, 2024, meeting with EPA. Irrespective of whether or not a contract is in place, EPA's conditional approval will require that all wastes be managed in accordance with applicable RCRA regulations.
12	2/14/2024	3-5	3.3.3	Section 3.3.3 states "The Borough was determined exempt from manifest requirements in 40 CFR § 262.20 for the transport of intact spent lead-acid batteries for disposal at a reclamation facility." Provide in the Closure Plan which exemption under 40 CFR 266 Subpart G NSB has determined to be applicable along with justification on how it applies to that specific exemption. Provide information on where the spent lead-acid batteries are going to be sent for reclamation. Provide information on the type of reclamation process that will be used (e.g. regeneration, electrolyte replacement).	40 CFR 266 Subpart G					Concur. Clarifying language has been added to this section along with a statement that a bill of lading will be used as the shipping paper for this waste stream.	While text clarifies that a bill of lading will be used under this exemption, it does not provide specific information on management. Please see prior EPA comment and provide additional information. NSB must update the addendum to include what exemption it applies for in the table under 40 CFR § 266.80 or that NSB chooses to manage its spent lead-acid batteries under the "Universal Waste" rule in 40 CFR Part 273.
13	4/25/2024	N/A	1.6.2	40 CFR § 265.112(b)(4) requires the Closure Plan to contain a detailed description of steps needed to remove or decontaminate all hazardous waste residues. Methods for sampling and analysis are included in these steps. The Closure Plan text states that analytical methods will be specified in Table 4-1 of the QAPP, but there is no Table 4-1 in the QAPP. Please include a table in this section of the Closure Plan or in the QAPP specifying analytical methods to be used in all closure sampling. If the table is placed in the QAPP, please reference it in this section of the Closure Plan.	CD, Appendix C, 3.5; 40 CFR § 265.112(b)(4)					Concur. Tables 1-3 and 1-4 have been added in Section 1.6.2 and include the analytical method for each analyte.	NSB added Tables 1-3 and 1-4 listing analytical methods to be used for each analyte in addition to descriptions of decontamination processes. EPA's approval will require NSB to use the most current methodologies specified in the most updated EPA hazardous waste test method/ SW-846. The closure plan addendum will need to update methods in Table 1-3 from SW8270D to SW8270E and from SW8082 to SW8082A, and in Table 1-4 from SW6020 to SW6020B. Please make these updates to the corresponding tables in the QAPP. In addition, please make sure that the soil closure performance standard for chromium in Table 1-4 is speciated chromium (III) and (VI). Update the closure performance standards to match the 18 AAC 75 Method 2 chromium cleanup levels based on speciation. In addition, please check Tables 1-3 and 1-4 and update the closure plan addendum to include all hazardous substances under 18 AAC 75 or justify why these hazardous substances are not included in analyses.
14	4/26/2024	3-5	Table 3-1	Footnote "a" in Table 3-1 cites Table 3-1, which appears to be a typo. Was this meant to cite Table 1-4 in the Closure Plan or QAPP Table B-2 for solids? This citation needs to be corrected with a reference to a QAPP Table B-1, other QAPP or Closure Plan table, or a regulatory list should be referenced for the unknown liquids.	N/A					N/A	Please correct footnote reference in Closure Plan Addendum.

15	4/26/2024	3-5	Table 3-1	Please update Table 3-1 to clarify what triggers testing waste materials for the analytes in QAPP Tables B-1 and B-2. Table 3-1 appears to cover some testing approaches but has no analytical testing for "spill cleanup liquids" and "mixed solvents", so all of the analytes in QAPP Table B-1 are excluded. Table 3-1 provides the 40 CFR § 261.24 list for "spill cleanup solids" which is again, a more abbreviated list than QAPP Table B-2.	N/A					N/A	Please update Table 3-1 in the Closure Plan Addendum to clarify what triggers testing waste materials for the analytes in QAPP Tables B-1 and B-2. Please also update any related language in the QAPP.
16	4/26/2024	3-5	Table 3-1	Text under the Waste column says "Methanol," however the abbreviation, flash point, and RCRA code F005 indicate methyl ethyl ketone (MEK) is being referenced. Replace "Methanol" with "Methyl Ethyl Ketone (MEK)" in Table 3-1. If this is incorrect, please update Table 3-1 for consistency with abbreviation, flash point, and RCRA code.	40 CFR § 261.31					N/A	Please update Table 3-1 in the Closure Plan Addendum to correct the "Methanol" to "Methyl Ethyl Ketone." Otherwise, correct the abbreviation, flash point, and RCRA code for "Methanol" in Table 3-1 in the Closure Plan Addendum.
17	2/12/2024	3-6	3.3.4.1	Bullet 1 on page 3-6 states "a station equipped with temporary berms and/or temporary wash basins will be established for decontamination..." Due to the large amount of decontamination to be conducted at multiple HWMFs and HWMUs, provide the proposed locations of decontamination to ensure that any potential spills from decontamination activities are easily identified.	40 CFR § 265.112(b)(4)				Concur. Text updated to reflect field approach with identifying decontamination stations.		Page 3-8, Section 3.3.2.3 states "a designated decontamination area will be constructed". It is still unclear as to where the proposed decontamination location(s) are planned to be throughout the closure. Provide proposed locations at each HWMU in the Closure Plan Addendum.
18	5/8/2024	3-7	3.3.2.2	"liquid transfer from the drums to the IBCs will be conducted using an air-compressor-powered pump and filter attachment".	CD Appendix C 3.5					N/A	Elaborate in the Closure Plan Addendum how the inadvertent mixing of waste will be prevented. Describe how you will decontaminate the filter and hoses between pumping of different types of waste. How will the consolidation of waste in drums prevent inadvertent mixing of different types of hazardous waste?
19	5/8/2024	3-6	Bullet #5	What is a Judgmental Authoritative Sampling approach?	CD Appendix C 3.4					N/A	NSB must elaborate on what is meant by Judgmental Authoritative Sampling approach in the Closure Plan Addendum.
20	5/8/2024	3-6	3.0	"Field characterization approach will be conducted on the unknown waste. The field approach will, at a minimum, consist of the following:" It is unclear what field characterization method will be utilized to accurately ascertain which waste from all the HWMUs are listed waste (e.g. F005, U154). Provide an adequate field characterization method to identify listed wastes provided in section 1.2 of this closure plan.	CD Appendix C 3.4					N/A	NSB needs to identify in the Closure Plan Addendum where they suspect there to be listed wastes and the methods for determining listed wastes. NSB needs to provide reasoning for determining what is a listed waste.
21	5/8/2024	3-14	3.3.5	"drums with waste deemed hazardous based on sample characterization..." Ensure hazardous wastes are also labeled with the appropriate hazardous waste codes (e.g. D001, D002).	40 CFR § 262.11(g)					N/A	Update the Closure Plan Addendum to include that all hazardous wastes will be labeled with the appropriate hazardous waste codes (e.g. D001, D002).
22	3/20/2024	3-16	3.3.6.4	Text states that groundwater sampling will only be conducted if soil confirmation sample results are above DEC migration to groundwater levels. 40 CFR § 265.112(b)(5) requires a detailed description of activities necessary to ensure that all partial closures and final closure satisfy the Closure Performance Standards, including but not limited to groundwater monitoring, leachate collection, and run-on and run-off control. Please add groundwater monitoring at HWMUs to the Closure Plan where there are potential impacts to groundwater. If it is not thought to be necessary, please explain in detail why	CD Appendix C, 3.5; 40 CFR § 265.112(b)(5)				Concur. The summer 2024 closure activities include waste removal, decontamination, and soil and decontamination water sampling. Once data is received and reviewed, the need for groundwater well installation and sampling will be made, if soil closure performance standards cannot be attained, an amendment to the closure plan will be made to address groundwater sampling.		This plan does not address groundwater monitoring protocols nor a detailed explanation as to why it is not thought to be necessary at this time. This topic was discussed at an April 22, 2024, meeting with EPA. EPA will require a post-closure plan if groundwater is determined to be impacted. If a post-closure plan is required, EPA will provide additional opportunities for public comment.
23	5/8/2024	6-1	6.0	The regulatory reference for financial assurance provided is incorrect. The reference cited is a pesticide regulatory reference).	40 CFR § 265.143(c)					N/A	Update this reference to 40 CFR § 265.143(c) in the Closure Plan Addendum.
24	4/25/2024	7-1	7	Section 7 describes a trust agreement submitted to EPA with no breakdown of costs for HWMUs closure. Section 1.1.1 states that Section 7.0 provides documentation demonstrating that financial assurance for closure has been established for each HWMU within the HWMF. In accordance with 40 CFR §§ 265.140, 265.143, and 270.14(b)(15), CD Appendix C, Section 6.0 requires documentation to be provided that demonstrates that financial assurance for closure has been established for each HWMU within the HWMF.	CD, Appendix C, 6.0; 40 CFR §§ 265.140, 265.143, and 270.14(b)(15)				Concur. Updated text in this section to state that there is \$3,296,244.67 allocated in the Trust Fund for the Atgasuk closures. Documentation has been added to Appendix G.		Sufficient- updated and included first page as attachment. EPA noticed that "\$15,201,004" is written in Section 7 instead of "\$15,201,004" cited in Appendix H. It is fine but wanted to make you aware of this typo. EPA will correct this in the approval.

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications - Appendix A

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	NSB Response to Comment	EPA Response to NSB Comment
25	2/9/2023	A-3	1.2	Paragraph 1 states that maximum waste inventory for the HWMF is 377 x 55 gallon drums while Table 2A total mentions that there are 238 x 55 gallon drums. CD Appendix C, Section 3.3 requires NSB to provide an estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the each HWMU. The referenced paragraph above provides two different estimates for the maximum inventory of hazardous wastes. Revise the provided estimates to reflect a consistent amount that provides the most accurate estimate and adjust the closing estimate, as applicable.	40 CFR § 265.112(b)(3)	See response to comment 14. Text and table updated to account for historical maximum inventory.	The total drum inventory in the table is 778 drums. Section 1.2 indicates that there are 774 drums total of waste. Please ensure that the correct number of drums is included in the closure report. If possible, correct the estimated inventory in the Closure Plan Addendum to reflect which is the accurate number. Please be advised the Closure Report must document exact numbers of drums, waste types, and volumes.
26	5/8/2024	A-5	3.3	Indicates that there will be 3 total drums worth of rinsate from decontaminating empty drums. 774 or 778 drums are expected to be consolidated. EPA does not agree with the estimated amount of generated rinsate from drum decontamination.	CD Appendix C, 3.5		If there is more rinsate generated than expected, the Closure Report must document the volume of decontamination waters generated during this closure.

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications - Appendix C

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	NSB Response to Comment	EPA Response to NSB Comment
27	2/9/2024	C-1	1.1	The first paragraph provides an address of "3302 Colville Street, Nuiqsut, AK 99789" and provides coordinates "70°13'14.0082"N, 150°59'38.1912"W." EPA cross referenced the provided coordinates and address and have found them to not match (completely off from each other). CD Appendix C, Section 2.0(a) requires NSB to provide accurate information on address, latitude, and longitude of HWMFs and HWMUs. If the provided address is different from the location of the HWMF, indicate as such.	CD Appendix C, 2.0(a)	No change made. This is the correct address for the power plant. This address may not exactly match the location of the HWMU.	Add language to the Closure Plan Addendum stating that NSB has reviewed for all addresses and coordinates for accuracy and that some HWMUs do not match the mailing addresses but are referenced for information purposes.
28	2/9/2024	C-2	1.1	The last paragraph states that the Power Plant HWMF also contains an active ADEC CSP Site. The Closure Plan provides minimal to no information on where the CSP site boundary is located, what exact contaminant of concerns are present in the contaminated area (mentioned petroleum but this description is vague). No delineation of the contaminated area under CSP was provided. CD Appendix C, Section 2.0(d) requires NSB to provide information on any releases and provide waste determination and applicable codes. Any ADEC CSP site that is within the HWMU must also be characterized for RCRA hazardous waste, and it must be cleaned up as part of the HWMU closure.	CD Appendix C, 2.0(d); 40 CFR § 265.111	Concur. The location of the CSP has been added to the figure. Text has been added to clarify that the delineation of the CSP has not been started yet (awaiting DEC approval of the workplan). Once delineation is completed, then the remediation can be designed.	Please be advised that any ADEC CSP site that is within the HWMU must also be characterized for RCRA hazardous waste, and it must be cleaned up as part of the HWMU closure. Update the Closure Plan Addendum to clarify that this regulated unit will be closed as part of this closure plan. Any investigation-derived waste from the ADEC CSP cleanup must be removed as part of the closure. If this unit cannot be closed under this plan, then a process for phased closure must be established.

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications - Appendix E

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	NSB Response to Comment	EPA Response to NSB Comment
29	5/8/2024	E-2	1.2	Paragraph states that the maximum inventory was 41 x 55 gallon drums but bullet #2 below the paragraph states there are 266 maximum inventory. It is unclear what is the estimated maximum inventory of waste. Provide the correct number and adjust numbers to match, as applicable.	CD Appendix C, 3.3		Please ensure that the correct number of drums is included in the closure report. If possible, correct the estimated inventory in the Closure Plan Addendum to reflect which is the accurate number. Please be advised the Closure Report must document exact numbers of drums, waste types, and volumes.
30	5/8/2024	E-4	3.3	The closure of the HWMF estimates the disposal of 66 or 266 drums worth of waste. There is no mention of any generation of rinsate attributed to the decontamination of consolidated drums/disposal.	CD Appendix C, 3.5		Provide an estimated rinsate amount generated from drum decontamination activities considering powerwashing in a decontamination method.

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications - Appendix G

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	NSB Response to Comment	EPA Response to NSB Comment
31	5/8/2024	G-2	Table 1G Row 5	Table 1G states that HWMU-4 consists of a gravel substrate. However, Section 1.2 Bullet #4 states that the substrate is unpaved dirt/tundra.	CD Appendix C, 2.0(f)		NSB must identify in the Closure Plan Addendum what is the correct substrate for HWMU-4. Adjust sampling procedures as applicable.
32	5/8/2024	G-3	Table 2G	Table 2G Row 2 and 3. Drum total is 69 drums. However, page G-2 in Section 1.2 mentions the maximum waste inventoried is 41 x 55 gallon drums.	CD Appendix C, 3.3		NSB must update the Closure Plan Addendum to identify the correct number of waste drums and adjust the closure estimate, as applicable.

North Slope Borough Nuiqsut Closure Plan Addendum Proposed Modifications - Appendix H

Comment ID	Comment Date	Page #	Section #	Comment or Edit	Applicable RCRA Regulation and/or CD Requirement	NSB Response to Comment	EPA Response to NSB Comment
33	2/12/2024	H-1	1.1	The paragraph provides an address of "3301 Sulook Avenue, Nuiqsut, AK 99789" and provides coordinates 70°13'15.6854"N, 150°59'41.7889"W. EPA cross referenced the provided coordinates and address and have found them to not match (address is more south than the location of the HWMF). CD Appendix C, Section 2.0(a) requires NSB to provide accurate information on address, latitude, and longitude of HWMFs and HWMUs. If the provided address is different from the location of the HWMF, indicate as such.	CD Appendix C, 2.0(a)	No change made. This is the correct address for the wastewater treatment facility. This address may not exactly match the location of the HWMU.	Add language to the Closure Plan Addendum stating that NSB has reviewed for all addresses and coordinates for accuracy and that some HWMUs do not match the mailing addresses but are referenced for information purposes.