

Hedgerow Hill Corporation

The following comments are being submitted by Hedgerow Hill Corporation on behalf of ASRC Consulting and Environmental Services, LLC. in reference to Air Quality Control Minor Permit AQ1621MSS01 on July 22, 2021.

Technical Analysis Report

Section 5 Application Review Findings; Subsection 2.

It should be noted that the wet scrubber was constructed as a component of the air emissions control module, and its installation is not outstanding. The wet scrubber will be in place and operational at the commencement of operations.

Air Quality Minor Permit AQ1621MSS01

Section 4 ORLs to Avoid Permit Classifications

Condition 15.2c

Under specific circumstances laboratory analysis may not be required for material characterization. As is the case when generator knowledge or source information is adequate to characterize waste material. Please revise this Condition to reflect the acceptability of Generator knowledge as a characterization method.

As we interpret this Condition, the statement "...in comport with the source test plan specified in Condition 15.2b;" serves to acknowledge that a source test plan is required before the start of operations, making this statement duplicative of Condition 15.2b. If this statement is intended to serve some other purpose, please clarify, otherwise we request the statement be removed.

Condition 15.2d(i)

It should be noted that the wet scrubber has been installed and is operation in the MRS-1. We request this Condition be removed.

Condition 15.3a

The MRS-1 unit is a first-of-its-kind built-for-purpose thermal remediation system, and while it was designed based on the substantive cumulative knowledge of numerous industry experts, 5 days is not adequate time to commission, shakedown, and optimize this very complex system and also allow completion of a source test that will produce meaningful and representative results. Further, there is only one source test company in Alaska with direct experience completing source tests for this type of thermal treatment and their availability also needs to be taken into consideration, as the validity of the source test results is a direct function of the source test company's capability.

The MRS-1 will be deployed in Valdez for approximately 2 months to treat approximately 6,000 tons of contaminated material. We request the flexibility to complete the source test within that time frame while treating that volume of soil. As a means to demonstrate regulated air pollutants (specifically HF) are not being emitted at levels that could exceed permit limits, ACES will employ

and HF emissions calculator that uses the levels of contamination of fluorinated compounds to predict worst case HF emissions. Other HF emissions testing methods can be considered in consultation with the Department, and if beneficial and feasible other test methods may be implemented before the actual source test.

Condition 15.3b

ACES acknowledges that periodic source tests are a necessary compliance measure to demonstrate the facility is operating within its permit limits. However, the requirement to conduct an annual source test is considered excessive as the MRS-1 does not include components that will change in their operations or functionality during that short time period to the extent they would materially impact the results of any source test. While there is a volumetric limit included in this Permit Condition, it results in a de facto annual source test as the facilities throughput is 5 tons per hour and at that rate of production, 43,800 tons equates to 8,760 hours of operating time. We must also consider that the mobile nature of the MRS-1 could result in the plant operating in a remote and difficult to access location at the time a source test is required, making testing impractical. Last, if the plant is idle for even a short period of time, a subsequent source test may be required with very limited material processed between each test. We request that Condition 15.3b(ii) be modified to require a source test every 3 years. This duration will address the issues identified above and ensure the facility is continuously operating withing acceptable air emissions limits.

Condition 16.4

It should be noted that the operation of the dry cyclone is accurately represented in Section 1 Table 1 Footnote c of the Technical Analysis Report as "...an optional initial particulate control measure to be used with select media as warranted." The dry cyclone has been installed as a safety measure to guarantee the full functionality of the baghouse given unknowns associated with the operation of the MRS-1 under a wide variety of conditions. The dry cyclone will only be operated when particulate loading results in a pressure drop across the baghouse that cannot be effectively managed by the baghouse air pulse cleaning system. At this point it is unknown if this condition will occur. Operation of the dry cyclone results in a secondary contaminated material stream that must be handled and ultimately thermally retreated adding inefficiency to plant operations. If it is not necessary to operate the dry cyclone system, it will not be brought on line or will be taken off line as is appropriate. We request this Condition be removed or modified to acknowledge the discretionary use of the dry cyclone.

Section 5 Recordkeeping, Reporting, and Certification Requirements

Condition 22.2

Our interpretation of this Condition is that the records to be retained as they relate to "sampling" in Conditions 22.2 b, c, d, e, f, g, and h are exclusively associated with source testing. If this is not the case, please clarify.