

March 8, 2004

Federal Express

U.S. Nuclear Regulatory Commission
ATTN: Mr. Myron Fliegel, Sr. Project Manager
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
11545 Rockville Pike
Two White Flint North
Rockville, Maryland

Subject: License SUB-1010; Docket No. 40-8027
Amendment Request for Raffinate Sludge Dewatering Project
Response to Request for Additional Information

Reference: Letter from Myron Fliegel to John Ellis, Acceptance of Raffinate Sludge
Dewatering Project for Detailed Review (TAC LU0029), dated 2/17/04

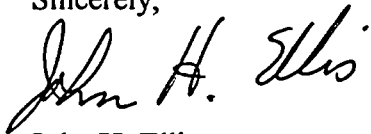
Dear Mr. Fliegel:

Sequoyah Fuels Corporation (SFC) submits this response to your referenced letter.

Responses to each of the individual questions are provided in Enclosure 1. A revised Figure 4 to the Applicants Environmental Report is also attached.

If you have any questions, please call me at (918) 489-5511, ext. 13, or Craig Harlin at ext. 14.

Sincerely,



John H. Ellis
President

xc: Kelly Burch, Esq. OK AG
Michael Broderick, OKDEQ
Rita K. Ware, EPA
Jeanine Hale, Cherokee Nation
Pat Ballard, NRMNC
Alvin Gutterman, Esq., Morgan Lewis & Bockius
Ricardo Munoz, USNRC Region IV

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Enclosure 1

Response to NRC Request for Additional Information Dated February 17, 2004

ENCLOSURE 1
Sequoyah Fuels Corporation
Amendment Request for Raffinate Sludge Dewatering
Request for Additional Information

Surface Water

1. It is not clear what rainfall event you have designed for; please state whether the PMP (referenced on Page 9) is the design storm. If it is not, describe the design event.

RESPONSE:

No specific designs for this project were based upon the MPE. The dewatering and storage of the sludge will take in areas of the site utilizing existing drainage systems, with minor modifications to ensure drainage as described in the Applicants Environmental Report. Historically, these drainage systems have been adequate to support the operation of the facility, and modifications made for this project will not significantly alter the drainage patterns currently in place.

The rainfall event referenced on Page 9 of the Applicants Environmental Report is the maximum precipitation event (MPE) used in the design of the disposal cell. This event (29 inches in 6 hours) is significantly higher than any recorded rainfall event for the SFC Site. Rainfall records for the Site were reviewed since 1990, and it was determined that the maximum monthly rainfall has been 14.95 inches, which occurred in June 2000. Also, the maximum daily rainfall during this time was 6.15 inches, which occurred on June 21, 2000.

Curbing and drainage diversion for this project was designed to prevent lateral movement of contamination, but restrict the overall surface area and flow destination to that which currently exists. In addition, the basin level will continue to drop as the project progresses due to sludge removal from that basin. Since this project is short in duration (6 to 12 months), does not increase storm water runoff to the receiving basins, reduces the basin level by its nature, and limits the wash water directed to these basins, historic rainfall amounts was assumed to continue through this project.

A rainfall event of 29 inches in 6 hours would raise the level in the Clarifier Basin 1A by 36 inches. Based on this maximum rainfall, after sludge dewatering operations have reduced the level sufficiently, the freeboard in Clarifier Basin 1A will be maintained at a minimum of 36 inches.

2. Please provide analysis, including but not limited to the following, to show how the design rainfall event will be accommodated:
 - a. Please provide design details regarding the sizing of sumps and pipes used to re-direct runoff, overflow and spills. Also, provide details or discussion of the adequacy of the height or cross-section of curbs and gutters (e.g. the north yellowcake drain) used to contain and redirect run-off.

RESPONSE:

Processing Pad

Runoff will be redirected in the area of the Processing Pad and the Feed Tank area. The asphalt Processing Pad will have a slope of approximately 1.2% from east to west. From the west edge of the Processing Pad the grade will be sloped at approximately 12% to the Clarifier Basin. This will allow runoff from precipitation and wash down to drain directly to Clarifier Basin 1A.

The north end of the processing pad will be sealed against the Laundry Building (which will be used as the bagging and weighing station), and the south edge will be an existing concrete berm that will be approximately 6 inches above the asphalt pad.

Berms will be installed along the east side after the filter press trailers are in place, and will be made of either asphalt or railroad ties, and will be approximately 6 inches high. If railroad ties are used, they will be covered with HDPE and sealed against the asphalt pad. The berms will be installed after the filter press trailers are put in place.

The west side of the Processing Pad will not contain a berm. This area will be sloped from the Processing Pad to Clarifier 1A Basin such that rain water runoff as well as wash down water will drain directly to the basin. Details of this configuration are shown in revised Figure 4, attached.

Since there is no berm on the west side of the Processing Pad, the slope of the Processing Pad and graded area between the Processing Pad and Clarifier Basin 1A will provide adequate drainage for the Processing Pad Area.

Feed Tank Area

A curb of 5 to 6 inches minimum will also be placed around the Feed Tank area. The area will have a 10-inch drain that drains any overflow, wash-down water or storm water back to Clarifier Basin 1A.

The area of the Feed Tank Area, including the ramp into the area, is approximately 1488 ft². The 10-inch drain will be adequate to drain this area in the event of heavy rainfall.

Yellowcake Storage Pad

No changes or modifications have been made or will be made to the Yellowcake Storage pad, other than the removal of the Tornado Berm on the northwest end of the pad. The berm was removed and the area graded in order to accommodate movement of the dewatered sludge to temporary storage. The area will be paved with asphalt in order to provide a smooth surface for transport. A metal building will also be moved into this area to serve as a temporary staging shed.

The Yellowcake Storage Pad has an existing curb of approximately 5 ½ inches. Slopes and runoff flow are shown in Figure 7 of the Applicants Environmental Report.

The North Yellowcake Drain is 12 inches in width and approximately 20 inches deep, and runs the width of the Yellowcake Pad at the location shown on Figure 7 (approximately 82 feet). This drains directly to the North Yellowcake Sump.

The South Yellowcake Drain is covered by a steel grate that is approximately 48 inches square. This grate covers a sump that is approximately 4 feet square by six feet deep which then drains to the South Yellowcake Sump through an 18-inch concrete pipe.

The drainage for the Yellowcake Storage Pad will continue to exist as it has since it was installed to support the operation of the facility. No problems have been encountered that indicate the drainage is not adequate, and no additional design calculations have been performed to support the temporary storage of the dewatered sludge.

- b. Please provide design details regarding the storage capacity of the clarifier basins and the amount of freeboard that will be maintained to show that it can accommodate the design storm. Otherwise, provide more details regarding the amount, location and treatment of overflow from these basins.

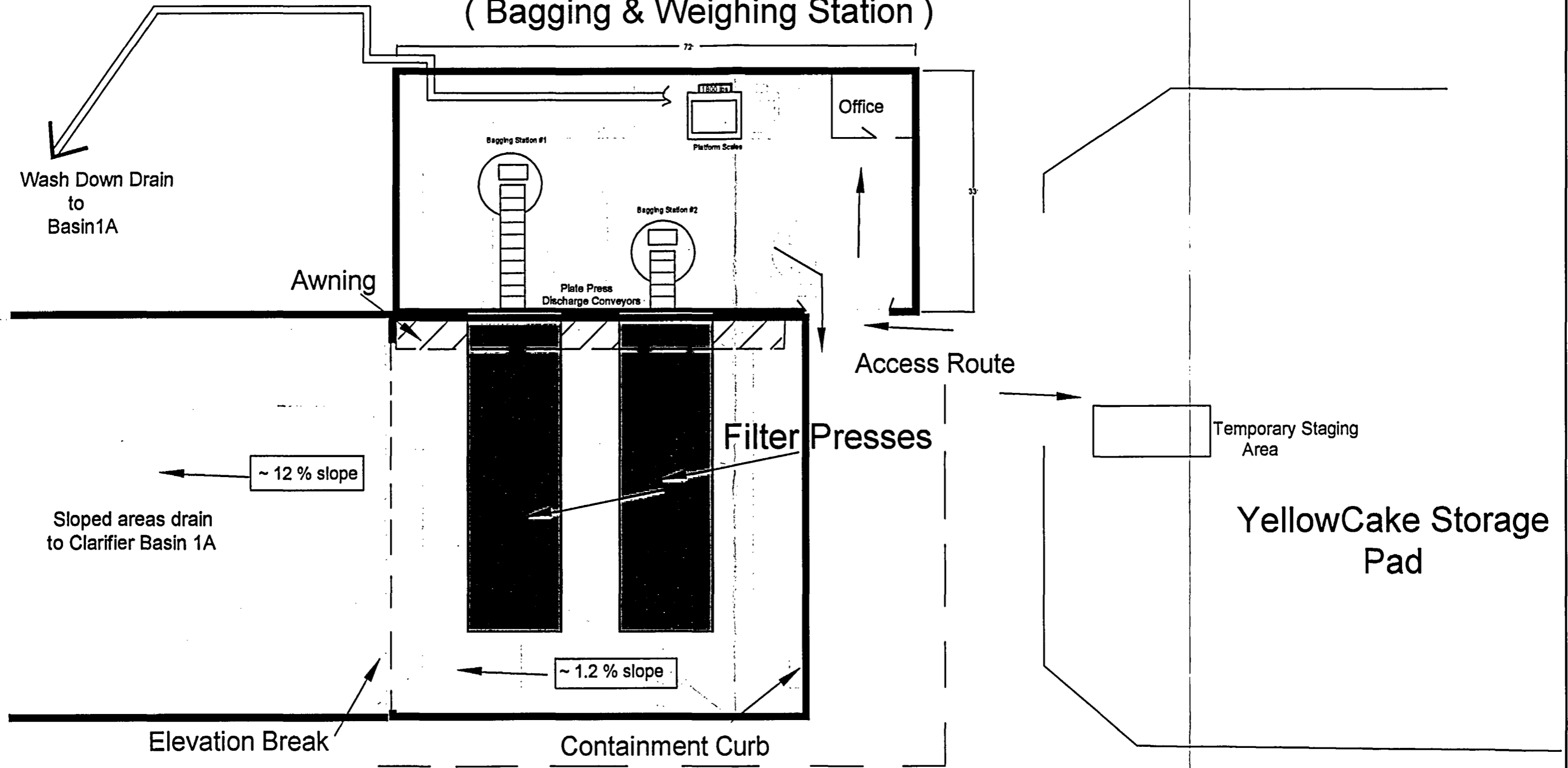
RESPONSE:

The Clarifier Basins are monitored on a daily basis, and a freeboard of 12 vertical inches is maintained. Historically, this capacity has been adequate, and no overflow has been experienced.

Once dewatering operations have started, as sludge is removed from the Clarifier basins, the amount of freeboard will be increased to provide additional storage capacity.

Laundry Building (Bagging & Weighing Station)

Clarifier Basin 1A



SEQUOYAH FUELS CORPORATION	
Title: Bagging and Weighing Area	
PREPARED BY: SFC	Filename: SFC0104A
Reviewed by: br	Figure No.4
Date: 03/08/2004	