## PUBLIC SERVICE COMPANY OF OKLAHOMA

A CENTRAL AND SOUTH WEST COMPANY

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September 20, 1982 File: 214.1011.210

Ms. Elinor Adensam Chief, Licensing Branch 4 Division of Licensing U.S. Nuclear Regulatory Commission Washington, D.C.

Dear Ms. Adensam:

In response to the ASLB Memorandum and Order of June 18, 1982, PSO has developed the attached Black Fox Station Soil Stabilization and Erosion Control Program. As directed, this plan addresses the concerns identified in the NRC Staff submittal of June 2, 1982. The plan previously has been discussed with both Mr. Dino Scaletti, NRC Licensing Branch, and Mr. Jerry LaRoach, NRC Environmental Engineering Branch.

We look forward to timely approval of the plan by the NRC Staff in order that we may begin implementation as soon as possible.

Very truly yours,

John B. West

Manager, Black Fox Station Project

JBW:SVP:bjr Attachment cc:Mr. Joseph Gallo, Isham, Lincoln & Beale

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CENTRAL AND SOUTH WEST SYSTEM

# BFS SOIL STABILIZATION AND EROSION CONTROL PLAN

### Introduction

The Limited Work Authorization issued to the BFS Project on July 26, 1978 import a legal obligation to maintain the BFS site in an environmentally prudent manner consistent with the conditions of the LWA. These conditions include requirements for implementation and maintenance of soil stabilization and erosion control measures.

On May 17, 1982, representatives of the NRC Staff conducted an inspection of the BFS site. The purpose of the inspection was to review construction activities completed to date under the BFS LWA and assess the potential for adverse off-site environmental impact resulting from these construction activities. As a result of this inspection, the NRC Staff identified certain areas of the BFS site requiring additional soil stabilization and erosion control measures. The purpose of this plan is to address those areas of concern identified by the NRC Staff.

### Scope

The following areas were identified by the NRC Staff as requiring additional soil stabilization and erosion control measures:

AREA I	Channels along the inclined RPV haul road;		
AREA II	Slopes along both sides of the barge slip and the inclined RPV haul road;		
AREA III	Eroded areas along the access road and railroad rights-of-way;		
AREA IV	Area surrounding the helicopter pad;		
AREA V	Engineered drainage system.		

Figure 1 illustrates the location of identified areas.

### Program Development

The BFS soil stabilization and erosion control plan is based on consultations with both commercial landscape contractors and representatives of the U.S. Department of Agriculture Soil Conservation Services. Following their inspection of the identified areas, these consultants provided recommendations based on their expert knowledge of local soils, climate, drainage methods and special procedures necessary to establish viable vegetative ground cover.

Based on these recommendations, a plan has been developed to address the areas of concern identified by the NRC Staff. The plan provides for construction of improved drainage channels along the inclined RPV haul road to control erosion. The plan further provides for establishing vegetative cover to stabilize the soil on identified inclined areas.

The selected method for establishing vegetative cover, where required, is a hydro-mulch application of both a quick germinating soil stabilizing grass, such as bermuda or fescue grass (depending on the season of application), and a mixture of native grasses. To facilitate the hydro-mulch application, soil samples from all areas to receive vegetative cover have been analyzed to determine the type and quantities of nutrients to be added to the soil.

### Program

ANEA I - Channels Along the RPV Haul Road: An improved drainage system will be constructed along the sides of the inclined RPV Haul Road. This will be accomplished by widening and shaping the existing channels as necessary and building concrete chutes in these channels to provide rapid drainage and prevent further soil erosion. To ensure effective drainage from the road surface to the concrete chutes and to prevent erosion of the roadbed, railroad crossties will be placed on the road bed in a baffle arrangement and secured to the roadbed to prevent displacement during runoff. This installation will provide both the channels and the roadbed with long-term stability against further erosion.

AREA II - Slopes Along Both Sides of the Barge Slip and Inclined RPV Haul Road: These areas will be provided a vegetative cover by planting a mixture of fescue and native grass seed. The seeding area will be prepared by shaping and scarifying the soil to provide a satisfactory bed for germination and growth. The seeds will be applied by a hydro-mulch process. This process distributes a stabilizing medium for the seed and soil to hold both in place until germination can occur. The process also distributes the fertilizer required during the first months of growth, and helps retain moisture during this critical period. Water will be applied to the area as required.

AREAS III and IV - Eroded Areas Along the Access Road and Railroad Rights-of-Way and the Area Surrounding the Helicopter Pad: The area surrounding the helicopter pad extends both east and west of the guard house. The areas east and west of the guard house will be seeded with grasses. The soil in the area north of the guard house consists of a mixture of shale and clay which have shown an insignificant amount of erosion since excavation, indicating the inherent stability of that soil. Therefore, no further measures to stabilize this area will be undertaken at this time. In the course of maintaining the site in an environmentally prudent manner, this area will be observed for evidence of accelerated erosion and appropriate stabilization methods will be employed as needed.

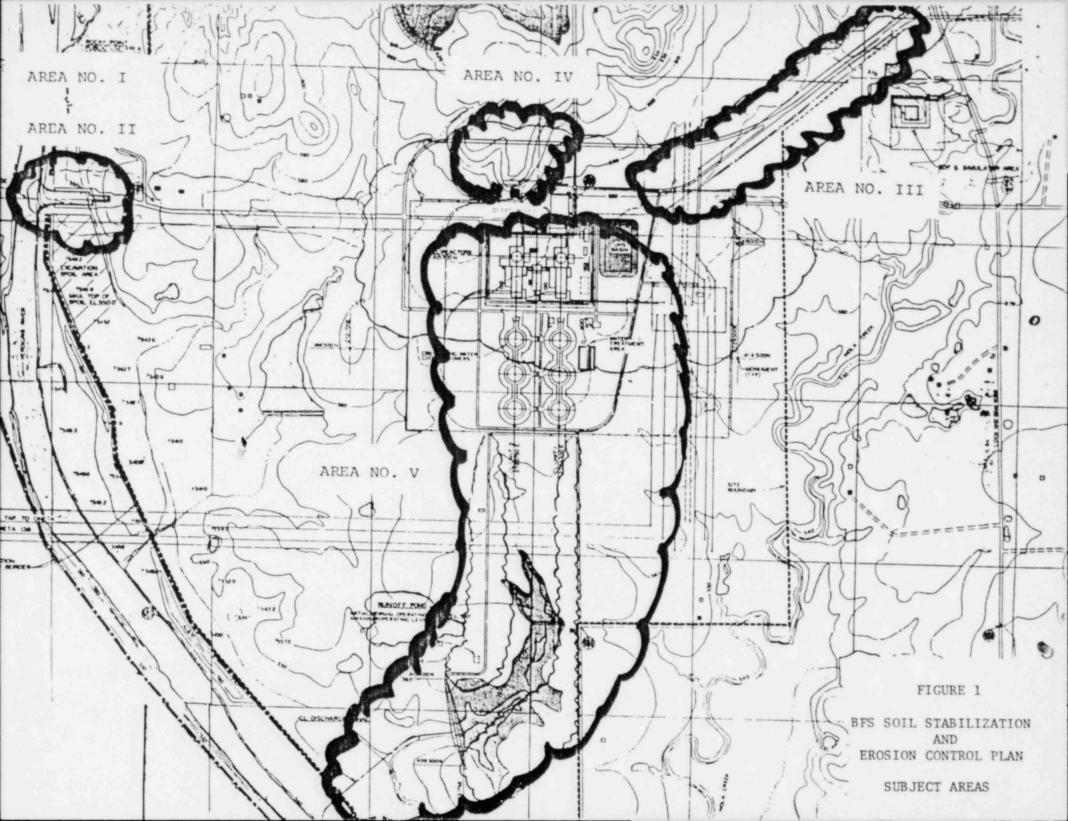
The remaining areas will be provided with a vegetative cover by planting a mixture of Bermuda grass and native grass seed. The application will be by hydro-mulch process similar to that used in Area No. II. The fertilizer application rate will be adjusted to the values indicated for each of these areas. Water will be applied to the area as required.

 $\frac{\text{AREA V}}{\text{drainage}}$  - Engineered Drainage System: There are no areas of the engineered drainage system experiencing significant erosion at this time. This stability is due to the protection of existing vegetation and inherent stability of the soil material. The drainage system will be maintained to serve its protective

function of minimizing the off-site impact of soil erosion. Should significant erosion develop in this area, appropriate measures will be employed to stabilize the soil.

### Schedule

three phased schedule for implementing the BFS soil stabilization and erosion control plan has been developed. While the plan for vegetation has been selected to provide reasonable assurance of success, there are several variables, including rainfall, temperature, and terrain, that may impact the results of the program. The phased approach will allow the benefit of using the experience gained in the first phase in later vegetative activities. Figure 2 details the implementation schedule by area.



BFS SOIL STABILIZATION AND EROSION CONTROL PLAN

# IMPLEMENTATION SCHEDULE

9/83			
8/83			
7/83			
6/83			
12/82			
11/82			
10/82			
9/82			
	Area No. I	Area No. II	Area Nos. III, IV