



# MINIMUM QUALITY CONTROL PLAN FOR NUCLEAR GAUGE COMPACTION TESTING

(Attach additional sheets as needed)

ECMS No. \_\_\_\_\_, State Route (S.R.) \_\_\_\_\_, Section \_\_\_\_\_, County \_\_\_\_\_

## I. ORGANIZATIONAL CHART

<u>Personnel</u>	<u>Full Name and Phone Number</u>	<u>Responsibilities</u>
A. Company Representative	_____	Oversees entire project
B. Project Superintendent	_____	Oversees fill construction operations
C. Project Foreman	_____	Oversees placement and compaction of material
D. Certified Nuclear Gauge Operator*	_____	Performs QC and acceptance compaction testing as specified in Pub 408, Sec. 206.3(a)
Operators Certification No. _____		Expiration Date _____
E. Compaction Control	_____	Technical & Emergency contact Supervisor
F. Radiation Safety Officer (RSO)	_____	Emergency Contact
G. PADEP Phone number	_____	Emergency Notification

\*If the Nuclear Gauge Operator is a 3rd party contractor, please provide the full company contact information below. Please use Section VI of this form to list alternative and/or additional Certified Nuclear Gauge Contractors and Operators that will perform QC testing on this project.

Company Name \_\_\_\_\_ Office Phone Number \_\_\_\_\_

Address \_\_\_\_\_

## II. NUCLEAR GAUGE INFORMATION

Type	Model No.	Calibration Date

**III. MATERIAL INFORMATION**

Material Class	Dry Density, pcf	Optimum Moisture, %	Proctor Test Date

**IV. EQUIPMENT LIST**

**MANUFACTURER**

**QUANTITY**

***A sufficient quantity and type of rollers and/or compaction equipment must be available and used in accordance with Pub 408, Section 206.3(b).***

Pad Foot Roller \_\_\_\_\_

Smooth Drum Vibratory Roller \_\_\_\_\_

Other (please specify below) \_\_\_\_\_

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## Compaction Acceptance Testing

- Rock embankment material will be placed in uniform horizontal layers not exceeding in depth the approximate average size of the largest rock, but no more than 36".
- 206 Rock embankment material to be installed in 18" lifts.
- The material will be placed for the full width of the available fill area.
- Compaction of each lift will be determined on the bases of nonmovement of the material
- Compact until embankment does not rut under construction equipment/loaded triaxle (GWV 73,280 pounds).

## Equipment

- A Cat CS56B Roller/Volvo SD100D (or equivalent) will be used to compact embankment material
  - o Operating Weight: 25,346 LB / 23,100 lb
  - o Static Linear Load: 166.5 lb/in / 155.95 lb/in
  - o Vibratory Frequency – 30.5 Hz / 31.2-33.6 Hz
  - o Centrifugal Force (min/max) – 31670/67600 lb / 46300/59300 lb