

m. 494.4

AC 150/5370-10

CHANGE 10

DATE 11/26/80

ADVISORY CIRCULAR

CHANGE



DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
Washington, D.C.

Subject: Change 10 to STANDARDS FOR SPECIFYING CONSTRUCTION OF AIRPORTS--
Provides for Payment of Temporary Erosion Control Measures

1. **PURPOSE.** This Change transmits Item P-156, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control. This is a new standard which provides for payment of temporary measures necessary to control air and water pollution during construction. The Change number and date of the new material are carried at the top of each page.
2. **CANCELLATION.** Advisory Circular 150/5370-7, Airport Construction Controls to Prevent Air and Water Pollution, dated April 26, 1971, is cancelled.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
		106-1 thru 106-5	11/26/80

A handwritten signature in dark ink, appearing to read 'Robert J. Aaronson', is written over a horizontal line.

ROBERT J. AARONSON
Acting Associate Administrator for Airports

Suggest filing this transmittal at the back of the AC. It will provide a reference authority for changes, a method of determining that all Changes have been received, and a check for determining if the AC contains the proper pages.

Initiated by: AAS-200

ITEM P-156 TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, 1.5
AND SILTATION CONTROL 1.6

1. DESCRIPTION 3

1.1 This item shall consist of temporary control measures as 5
shown on the plans or as ordered by the Engineer during the life 6
of a contract to control water pollution, soil erosion, and 9
siltation through the use of berms, dikes, dams, sediment basins, 13
fiber mats, gravel, mulches, grasses, slope drains, and other 19
erosion control devices or methods. 19

The temporary erosion control measures contained herein shall be 21
coordinated with the permanent erosion control measures specified 22
as part of this contract to the extent practical to assure 23
economical, effective, and continuous erosion control throughout 25
the construction period. 25

Temporary control may include work outside the construction 27
limits such as borrow pit operations, equipment and material 29
storage sites, waste areas, and temporary plant sites. 31

2. MATERIALS 33

2.1 GRASS. Grass which will not compete with the grasses sown 37
later for permanent cover shall be a quick-growing species (such 38
as ryegrass, Italian ryegrass, or cereal grasses) suitable to the 40
area providing a temporary cover. 40

2.2 MULCHES. Mulches may be hay, straw, fiber mats, netting, 46
bark, wood chips, or other suitable material reasonably clean and 49
free of noxious weeds and deleterious materials. 49

2.3 FERTILIZER. Fertilizer shall be a standard commercial grade 52
and shall conform to all Federal and state regulations and to the 54
standards of the Association of Official Agricultural Chemists. 54

2.4 SLOPE DRAINS. Slope drains may be constructed of pipe, 57
fiber mats, rubble, portland cement concrete, bituminous 61
concrete, or other materials that will adequately control 62
erosion. 62

2.5 OTHER. All other materials shall meet commercial grade 65
standards and shall be approved by the Engineer before being 66
incorporated into the project. 66

3. CONSTRUCTION REQUIREMENTS 68

3.1 GENERAL. In the event of conflict between these 71
requirements and pollution control laws, rules, or regulations of 73
other Federal, state, or local agencies, the more restrictive 76
laws, rules, or regulations shall apply. 78

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The Engineer shall be responsible for assuring compliance to the 80
extent that construction practices, construction operations, and 83
construction work are involved. 83

***** 87.1

Some states, municipalities, and pollution control 90
authorities have very specific regulations for air and water 91
pollution controls. These may include requirements for: 92

1. Use of smoke density charts. 94

2. Measurement of weight and density (micrograms per cubic 96
meter of air) of suspended particulate. 97

3. Permissible weights of emission in pounds per hour 99
(kilograms per hour) versus pounds per hour (kilograms per 100
hour) of material processed. 100

4. Open burning. 102

5. Erosion control measures. 104

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3.2 SCHEDULE. Prior to the start of construction, the 112
Contractor shall submit schedules for accomplishment of temporary 112
and permanent erosion control work, as are applicable for 113
clearing and grubbing; grading; construction; paving; and 117
structures at watercourses. The Contractor shall also submit a 118
proposed method of erosion and dust control on haul roads and 119
borrow pits and a plan for disposal of waste materials. Work 120
shall not be started until the erosion control schedules and 120
methods of operations for the applicable construction have been 121
accepted by the Engineer. 121

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Several methods of controlling dust and other air pollutants 126
include: 126

1. Exposing the minimum area of erodible earth. 128

2. Applying temporary mulch with or without seeding. 130

3. Using water sprinkler trucks. 132

4. Using covered haul trucks. 134

5. Using dust palliatives or penetration asphalt on haul 136
roads. 136

6. Using plastic sheet coverings. 138

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3.3 AUTHORITY OF ENGINEER. The Engineer has the authority to
limit the surface area of erodible earth material exposed by
clearing and grubbing, to limit the surface area of erodible
earth material exposed by excavation, borrow and fill operations,
and to direct the Contractor to provide immediate permanent or
temporary pollution control measures to minimize contamination of
adjacent streams or other watercourses, lakes, ponds, or other
areas of water impoundment.

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3.4 CONSTRUCTION DETAILS. The Contractor will be required to
incorporate all permanent erosion control features into the
project at the earliest practicable time as outlined in the
accepted schedule. Except where future construction operations
will damage slopes, the Contractor shall perform the permanent
seeding and mulching and other specified slope protection work in
stages, as soon as substantial areas of exposed slopes can be
made available. Temporary erosion and pollution control measures
will be used to correct conditions that develop during
construction that were not foreseen during the design stage; that
are needed prior to installation of permanent control features;
or that are needed temporarily to control erosion that develops
during normal construction practices, but are not associated with
permanent control features on the project.

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Where erosion is likely to be a problem, clearing and grubbing
operations should be scheduled and performed so that grading
operations and permanent erosion control features can follow
immediately thereafter if the project conditions permit;
otherwise, temporary erosion control measures may be required
between successive construction stages.

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The Engineer will limit the area of clearing and grubbing,
excavation, borrow, and embankment operations in progress,
commensurate with the Contractor's capability and progress in
keeping the finish grading, mulching, seeding, and other such
permanent control measures current in accordance with the
accepted schedule. Should seasonal limitations make such
coordination unrealistic, temporary erosion control measures
shall be taken immediately to the extent feasible and justified.

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In the event that temporary erosion and pollution control
measures are required due to the Contractor's negligence,
carelessness, or failure to install permanent controls as a part
of the work as scheduled or are ordered by the Engineer, such
work shall be performed by the Contractor at his/her own expense.

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The Engineer may increase or decrease the area of erodible earth
material to be exposed at one time as determined by analysis of
project conditions.

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ITEM P-156 TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION,
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The erosion control features installed by the Contractor shall be acceptably maintained by the Contractor during the construction period.

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Whenever construction equipment must cross watercourses at frequent intervals, and such crossings will adversely affect the sediment levels, temporary structures should be provided.

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Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or manmade channels leading thereto.

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4. METHOD OF MEASUREMENT

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4.1 Temporary erosion and pollution control work required which is not attributed to the Contractor's negligence, carelessness, or failure to install permanent controls will be performed as scheduled or ordered by the Engineer. Completed and accepted work will be measured as follows:

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(a) Temporary seeding and mulching will be measured by the square yard (square meter).

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(b) Temporary slope drains will be measured by the linear foot (meter).

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(c) Temporary benches, dikes, dams, and sediment basins will be measured by the cubic yard (cubic meter) of excavation performed, including necessary cleaning of sediment basins, and the cubic yard of embankment placed at the direction of the Engineer, in excess of plan lines and elevations.

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(d) All fertilizing will be measured by the ton (kilogram).

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4.2 Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor with costs included in the contract prices bid for the items to which they apply.

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5. BASIS OF PAYMENT	253
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5.1 Accepted quantities of temporary water pollution, soil	256
erosion, and siltation control work ordered by the Engineer and	257
measured as provided in Paragraph 156-4.1 will be paid for under:	259

Item P-156-5.1	Temporary seeding and mulching--per square yard (square meter)	261
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Item P-156-5.1	Temporary slope drains--per linear foot (meter)	264
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Item P-156-5.1	Temporary benches, dikes, dams and sediment basins--per cubic yard (cubic meter)	267
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Item P-156-5.1	Fertilizing--per ton (kilogram)	270
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Where other directed work falls within the specifications for a	272
work item that has a contract price, the units of work shall be	274
measured and paid for at the contract unit price bid for the	275
various items.	275

Temporary control features not covered by contract items that are	277
ordered by the Engineer will be paid for in accordance with	278
Section 90-05.	278

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