# **PURPOSE**

To establish guidelines when permits will be issued for workover service rigs exceeding legal size or weight for movement on the state highway system.

#### POLICY STATEMENT

As authorized by section 39-12-02 NDCC and Article 38-06 NDAC, the North Dakota Highway Patrol (NDHP) will issue single trip permits, when good cause is shown, for the movement of oversize and/or overweight workover service rigs.

The following procedures outline the requirements and methods for issuing permits for oversize and overweight workover service rigs.

## **DEFINITIONS**

Non-divisible - A workover service rig that cannot be readily or reasonably dismantled and which is reduced to a minimum practical size and weight.

Special Mobile Equipment - Every overweight, self-propelled workover service rig that is only incidentally operated over a highway.

Bridge Analysis - An analysis of vehicle axle weights, axle spacings, track width, and gross vehicle weight completed by NDDOT engineers to determine impact on bridges and highway infrastructure.

## **PROCEDURE**

#### A. Permit Requirements

- Permits must be in possession of the operator prior to starting any movement. Permits will designate
  the route of travel and may contain such other restrictions as deemed necessary by the NDHP or
  North Dakota Department of Transportation (NDDOT) engineers. The NDHP has the authority to
  revoke permits when the holder violates or abuses the privilege or conditions of the permits.
- 2. General travel restrictions
  - a. Single trip permits shall not be issued authorizing overdimensional movements from  $\frac{1}{2}$  hour after sunset to  $\frac{1}{2}$  hour before sunrise unless:
    - Ten feet or less in width and one hundred twenty feet or less in length, or
    - 2) Approved by the superintendent
  - b. Single trip permits for overwidth movements that exceed 16 feet shall not be issued authorizing movements on Saturday after 12 noon, all day Sunday, and on holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.
    - 1) No overwidth permit exceeding 16 feet will be valid from 12 noon the day before the holiday until sunrise the day after the holiday.
  - c. Single trip permits shall not authorize movements when inclement weather prevails, highways are slippery, or when visibility is ½ mile or less.
  - d. Single trip permits do not authorize travel on shoulders of road.
  - e. Oversize vehicle movements shall allow traffic to pass.
  - f. A single trip permit shall apply to the movement of one workover service rig only.
  - g. All permits shall require a minimum distance of 1,000 feet between workover service rigs in a convoy of two or more workover service rigs.
  - h. A single trip permit is valid for multiple movements made within one 24-hour period, or a one-way movement made within a five day period.
- 3. General safety requirements
  - All overdimensional workover service rigs shall have minimum 18" by 18" red or bright orange flags displayed on the traffic side front and rear.
  - b. When the overall length exceeds 75 feet in length and/or 8 feet 6 inches in width, there shall be at least a 12" x 60" OVERSIZE LOAD sign on the front and rear. The lettering shall be black on yellow background. Letters shall be at least 8 inches high with 1-inch brush stroke.

- c. Authorized oversize movements made from ½ hours after sunset to ½ hour before sunrise require:
  - 1) Clearance lights visible from the front, rear, and side marking the outermost portion of the vehicle and load that extend beyond 8 feet 6 inches.
  - 2) One rotating or two flashing amber lights mounted above the cab visible at a distance not less than 500 feet.
    - a) When lights on the cab are not visible to the rear, additional flashing amber lights are required at the rear.
  - 3) Lights shall be SAE (Society of Automotive Engineers) approved for Class 1 lights and reflectors.
  - 4) Vehicle must be capable of traveling at the posted highway speed.
- d. All workover service rig hydraulic systems must be secured to prevent the shifting, moving, or accidental lifting of the hydraulic systems.
- e. Workover service rigs must have two mirrors to reflect a rear view of 200 feet to the driver.
- f. When the load extends beyond the bed or body of the workover service rig to the rear by four feet or more, a 12"x12" red flag shall be displayed at the extreme rear end of the load.
- g. All commercial oversize workover service rigs must be equipped in accordance with the requirements and specifications of Parts 393 and 396 of 49CFR.

#### General size limitations

- a. Single trip permits shall not be issued for movements exceeding the vertical clearance under structures. If there is a bypass or exit ramp around structures, permits may be issued directing the movement around the structure. Communication cables may be as low as 15 feet 6 inches, signal lights as low as 16 feet, and flashing signal lights may be as low as 17 feet.
  - 1) The DOT list of bridges with vertical clearances will be referred to when issuing all overheight permits and may cause overheight movements to be given special route restrictions.
  - 2) ALL VERTICAL CLEARANCES SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.
- b. Road construction may limit overwidth movements to 10 feet in width or less or overheight movements on some highways. Visit the NDDOT Travel Information Map at www.dot.nd.gov/travel-info.
- 5. General conditions for all overweight movements
  - a. No permit shall be issued for an overweight workover service rig that can be reasonably made to conform to legal limits. Overweight permits will be issued for one piece nondivisible workover service rigs only.
  - b. Overweight permits are not valid for movement on bituminous pavements when the atmospheric temperature is 90°F or above or when otherwise deemed necessary by the North Dakota Department of Transportation.
  - c. Routing is restricted by the Permit Bridge Load Limitations Map (Policy 9-6 Annex A), the Approved Gross Vehicle Weight Map (Policy 9-6 Annex D), and the Load Restriction Map (<a href="https://www.dot.nd.gov/roadreport/loadlimit/loadlimitinfo.htm#truckroutingmaps">https://www.dot.nd.gov/roadreport/loadlimit/loadlimitinfo.htm#truckroutingmaps</a>)
  - d. Spring weight limits and load restriction weight limits on state highways other than during the spring thaw (Policy 9-17). ( <a href="https://www.dot.nd.gov/travel-info">www.dot.nd.gov/travel-info</a>)
    - Overweight permits will not be issued during the period of spring load restrictions, nor on highways with load restrictions year round, except as:
      - a) Provided for in the Road Restriction Permit Policy.
        - 1)) The workover service rig must be stripped to the most minimum weights.
        - 2)) District engineer approval shall be required when the weight on a group of axles exceeds the posted weight limit by 8,000 pounds and travel is on a highway restricted by legal weights, 8-ton or 7-ton, or 5,000 pounds and travel is on a 6-ton highway.
          - a)) Travel on the state system may be minimal.
          - b)) Removal of the derrick section may be required.
        - 3)) When an emergency has been declared.
  - e. Gross vehicle weight limitations of self-propelled single unit workover service rigs.
    - Single trip permits may be issued for the movement of self-propelled single unit workover service rigs manufactured after the year 2010 provided the gross vehicle weight does not exceed:

Permit Policy for Movement of Oversize and Overweight Workover Service Rigs Ref: 9-6 Annex G (3/2023)

Page 3

- a) 96,800 pounds on a 4-axle workover service rig.
- b) 106,800 pounds on a 5-axle workover service rig.
- c) 114,800 pounds on a workover service rig with 6 or more axles.
- 2) A single trip permit may be issued for the movement of self-propelled single unit workover service rigs manufactured before the year 2011 provided the gross vehicle weight does not exceed:
  - a) 100,700 pounds on a 4-axle workover service rig.
  - b) 111,100 pounds on a 5-axle workover service rig.
  - c) 119,500 pounds on a workover service rig with 6 or more axles.
- f. Axle weight limitations for workover service rigs \$100 permit fee. All workover service rigs manufactured after the year 2010 must comply with axle weights in Axle Weight Table 1.
  - 1) The following are the maximum permitted weights for single and tandem axles that may not exceed 650 pounds per inch width of tire. A group with three or more axles may not exceed 550 pounds per inch width of tire. (Metric tire sizes are converted to inches by dividing millimeters by 25.4. "m" denotes tire width in millimeters.)

[Axle Weight Table 1]

Tire	Single Axle	Single Axle	Tandem Axle	Tandem Axle	Triple Axle	Triple Axle	Four Axle
Size	2 Tires	4 Tires	4 Tires	8 Tires	6 Tires	12 Tires	16 Tires
9	11,700 #	23,400 #	23,400 #	46,800 #	29,700 #	59,400 #	*68,000 #
10	13,000 #	26,000 #	26,000 #	*50,000 #	33,000 #	*60,000 #	*68,000 #
11	14,300 #	28,600 #	28,600 #	*50,000 #	36,300 #	*60,000 #	*68,000 #
11.2 285 m	14,560 #	29,120#	29,120 #	*50,000 #	36,960 #	*60,000#	*68,000 #
11.6 295 m	15,080 #	*30,000 #	30,160#	*50,000 #	38,280 #	*60,000#	*68,000 #
12	15,600 #	*30,000 #	31,200 #	*50,000 #	39,600 #	*60,000 #	*68,000 #
12.4	,	,	,	•	,	•	,
315 m	16,120#	*30,000 #	32,240 #	*50,000 #	40,920#	*60,000 #	*68,000 #
13	16,900#	*30,000 #	33,800 #	*50,000 #	42,900 #	*60,000 #	*68,000 #
14	18,200#	*30,000 #	36,400 #	*50,000 #	46,200 #	*60,000 #	*68,000 #
14.3 365 m	18,590 #	*30,000 #	37,180#	*50,000 #	47,190#	*60,000#	*68,000 #
15	19,500 #	*30,000 #	39,000 #	*50,000 #	49,500 #	*60,000 #	*68,000 #
15.1 385 m	19,630 #	*30,000 #	39,260 #	*50,000 #	49,830 #	*60,000#	*68,000 #
16:5	21,450 #	*30,000 #	42,900 #	*50,000 #	54,450 #	*60,000 #	*68,000 #
16.7 425 m	21,710#	*30,000 #	43,420 #	*50,000 #	55,110 #	*60,000#	*68,000 #
17.5 445 m	22,750 #	*30,000 #	45,500 #	*50,000 #	57,750 #	*60,000#	*68,000 #
18	23,400 #	*30,000 #	*46,800 #	*50,000 #	59,400 #	*60,000 #	*68,000 #
20.5	26,650 #	*30,000 #	*46,800 #	*50,000 #	*60,000#	*60,000#	*68,000 #

<sup>\*</sup>Maximums include all tolerances

2) On workover service rigs manufactured before the year 2011, the following are the maximum permitted weights. The single and tandem axle weights may not exceed 670 pounds per inch width of tire. See previous table for weight allowed on groupings with three or more axles. (Metric tire sizes are converted to inches by dividing millimeters by 25.4. "m" denotes tire width in millimeters.) [Axle Weight Table 2]

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires
11	14,740 #	29,480 #	29,480 #	*50,000 #
11.2 (285 m)	15,008 #	*30,000 #	30,016 #	*50,000 #
11.6 (295 m)	15,544 #	*30,000 #	31,088 #	*50,000 #
12	16,080 #	*30,000 #	32,160 #	*50,000 #
12.4 (315 m)	16,616#	*30,000 #	33,232 #	*50,000 #
13	17,420 #	*30,000 #	34,840 #	*50,000 #
14	18,760 #	*30,000 #	37,520 #	*50,000 #
14.3 (365 m)	19,162#	*30,000 #	38,324 #	*50,000 #
15	20,100 #	*30,000 #	40,200 #	*50,000 #
15.1 (385 m)	20,234 #	*30,000 #	40,468 #	*50,000 #
16.5	22,110 #	*30,000 #	44,220 #	*50,000 #
16.7 (425 m)	22,378 #	*30,000 #	44,756 #	*50,000 #
17.5 (445 m)	23,450 #	*30,000 #	*46,800 #	*50,000 #
18	24,120 #	*30,000 #	*46,800 #	*50,000 #
20.5	27,470 #	*30,000 #	*46,800 #	*50,000 #

<sup>\*</sup>Maximums include all tolerances

3) On workover service rigs manufactured before the year 2011, the following are the maximum permitted weights. Single and tandem axle weights may not exceed 695 pounds per inch width of tire. A group with three or more axles may not exceed 550 pounds per inch width of tire. (Metric tire sizes are converted to inches by dividing millimeters by 25.4. "m" denotes tire width in millimeters.)

[Axle Weight Table 3]

Tire	Single	Single	Tandem	Tandem	Triple	Triple	Four
Size	Axle	Axle	Axle	Axle	Axle	Axle	Axle
	2 Tires	4 Tires	4 Tires	8 Tires	6 Tires	12 Tires	16 Tires
9	12,510 #	25,020 #	25,020 #	50,040 #	29,700 #	59,400 #	70,720 #
10	13,900 #	27,800 #	27,800 #	*52,000 #	33,000 #	*62,400 #	*70,720 #
11	15,290 #	30,580#	30,580 #	*52,000 #	36,300 #	*62,400 #	*70,720 #
11.2							
285 m	15,568 #	31,136 #	31,136 #	*52,000 #	36,960 #	*62,400 #	*70,720 #
11.6							
295 m	16,124 #	*31,200 #	32,248 #	*52,000 #	38,280 #	*62,400 #	*70,720 #
12	16,680 #	*31,200 #	33,360 #	*52,000 #	39,600 #	*62,400 #	*70,720 #
12.4							
315 m	17,236 #	*31,200 #	34,472 #	*52,000 #	40,920 #	*62,400 #	*70,720 #
13	18,070 #	*31,200 #	36,140 #	*52,000 #	42,900 #	*62,400 #	*70,720 #
14	19,460 #	*31,200 #	38,920 #	*52,000 #	46,200 #	*62,400 #	*70,720 #
14.3							
365 m	19,877 #	*31,200 #	39,754 #	*52,000 #	47,190 #	*62,400 #	*70,720 #
15	20,850 #	*31,200 #	41,700 #	*52,000 #	49,500 #	*62,400 #	*70,720 #
15.1							
385 m	20,989 #	*31,200 #	41,978 #	*52,000 #	49,830 #	*62,400 #	*70,720 #
16:5	22,935 #	*31,200 #	45,870 #	*52,000 #	54,450 #	*62,400 #	*70,720 #
16.7							
425 m	23,213 #	*31,200 #	46,426 #	*52,000 #	55,110 #	*62,400 #	*70,720 #
17.5							
445 m	24,325 #	*31,200 #	48,650 #	*52,000 #	57,750 #	*62,400 #	*70,720 #
18	25,020 #	*31,200 #	*48,672 #	*52,000 #	59,400 #	*62,400 #	*70,720 #

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires	Triple Axle 6 Tires	Triple Axle 12 Tires	Four Axle 16 Tires
20.5	28,495#	*31,200 #	*48,672 #	*52,000 #	*62,400 #	*62,400 #	*70,720 #

<sup>\*</sup>Maximums include all tolerances

- For all axle groupings with four axles or more, no axle shall exceed 19,000 pounds per axle.
  - a) On a group with five axles, the gross weight shall not exceed 85,000 pounds; and on a group with six axles, the gross weight shall not exceed 102,000 pounds.
- 6. Crossing state highways
  - a. Permits are not required.
- 7. Movements over railroad crossings and tracks.
  - In the event of an emergency involving BNSF Railroad crossings and tracks, immediately call 1-800-832-5452 for assistance.
  - b. In the event of an emergency involving Red River Valley & Western Railroad crossings/tracks, immediately call 1-800-747-4919 for assistance.
  - In the event of an emergency involving Canadian Pacific Railway crossings/tracks immediately call 1-800-716-9132 for assistance.

# 8. Liability of permittee

- a. The applicant or permittee, as a condition for obtaining an oversize and/or overweight permit, shall assume all responsibility for accidents, damage, or injury to any persons or damage to public or private property caused by the movement of any oversize or overweight workover service rig or load covered by the permit while upon public highways of the state.
- b. The applicant or permittee agrees to indemnify and hold harmless the North Dakota Department of Transportation, the North Dakota Highway Patrol, their officers and employees from any and all claims resulting directly or indirectly from the movement of an oversize and/or overweight workover service rig or load on any public highway of the state of North Dakota.

## B. Application Procedure

- 1. Single trip permits can be obtained online at <a href="https://www.nd.gov/ndhp/e-permits">www.nd.gov/ndhp/e-permits</a>, click on E-Permits.
  - a. Permits purchased online may be submitted to the permit office for review.
  - b. Information required to obtain a single trip permit:
    - 1) Company name, address, city, state, zip code, telephone number, and e-mail address.
    - 2) Description of workover service rig: year, make, serial number, license number, and state (optional), tire width (marking from tire sidewall), number of axles, number of tires per axle, axle spacings, and track width.
      - a) A track width measurements form must be completed when:
        - 1)) The exterior track width on an axle(s) with two tires is less than 6 feet.
        - 2)) The exterior track width on an axle(s) with four tires is less than 8 feet.
      - b) The track width measurements form is available at <a href="www.nd.gov/ndhp/permit-application-forms">www.nd.gov/ndhp/permit-application-forms</a>, click on Motor Carrier, Permit Application Forms, Diagram for Track Width Measurements.
    - Overall dimensions of workover service rig.
    - 4) Axle weights and gross weight of workover service rig.
    - 5) Start date of travel, time, point of origin and destination, and desired route of travel (optional).
- 2. Permits can also be obtained from the Highway Patrol permit office, motor carrier inspectors, or troopers.
  - Applications to the permit office may be made in person, by telephone, by e-mail, or through a
    permit service company.
  - b. Applications may be made with a trooper or motor carrier inspector, in person or by telephone.
- 3. A legible electronic or paper copy of the permit must be in possession prior to entering North Dakota or starting movement.
  - a. The applicant and driver are responsible for complying with the travel restrictions and safety

Permit Policy for Movement of Oversize and Overweight Workover Service Rigs Ref: 9-6 Annex G (3/2023)
Page 6

requirements listed on the receipt/permit.

- 4. Violating provisions and conditions on a single trip permit may result in invalidating the permit.
- Permit fees
  - \$100 for each single trip permit (SFN 3507, Receipt/Permit) for an overdimensional and overweight workover service rig.
  - b. \$990 for an annual weight increase on a workover service rig with axle weights as shown in Table 3 or gross vehicle weights as shown below:
    - The axle weights exceed 670 pounds per inch of tire width on a single or tandem axle, exceed 60,000 lbs. on a triple axle, or 68,000 lbs. on a quad axle (this is in addition to the single trip permit fee).
    - 2) The gross vehicle weights exceed 96,800 pounds on a 4-axle workover rig, 106,800 pounds on a 5-axle workover rig, and 114,800 pounds on a workover rig with 6 or more axles.
    - 3) The weight increase is valid for 365 days.
  - c. Ton-mile fees as described in Policy 9-17, Road Restriction Permit Policy for Movement of Nondivisible Vehicles and Loads.
  - Official, publicly-owned, emergency, or military workover service rigs shall not be required to pay charges for permits. (No fee to commercial hauler doing charity hauling.)
  - e. \$5 fee for each permit faxed.
  - f. \$10 service/routing fee for each single trip permit.
  - g. The fee for an NDHP escort is \$50 per hour and \$.50 per mile per trooper.
- 6. Single trip permits can be purchased online at <a href="www.nd.gov/ndhp/e-permits">www.nd.gov/ndhp/e-permits</a>. Application for permits can be made with the North Dakota Highway Patrol, Permit Office, 600 E Boulevard Avenue Dept. 504, Bismarck, ND 58505-0240. The telephone number is 701-328-2621.