

VINYL CHLORIDE TANK CAR LOADING PROCEDUREPREVIOUS DAY

- A. Loading coordinator gets list of cars (for following day) from Shipping Administration.
- B. Loading coordinator calls Railroad and gives them a line up of where to spot each car (Dispatcher - 8644).

DAY OF LOADING

- A. Loading coordinator decides which tank to load from:
 - 1. Is there enough inventory in the tank to load the cars?
 - 2. Is the tank being pumped somewhere else?
 - 3. Are we making into the tank?
- B. Loading coordinator circulates the tank and samples it:
 - 1. Be sure to circulate using P161 through loading rack
 - 2. Circulate for 15-30 minutes, then take sample.
 - 3. Loading coordinator analyzes sample and okays tank for loading (See Vinyl Chloride Loading and Shipping Report for analysis and specs).
 - 4. Loading operator gets a sample cylinder ready for each car.
 - a. cylinder must have a product label on it.
 - b. cylinder must be in good condition. NO LEAKS!!
 - c. cylinder must be labeled with car number.
 - 5. Loading operator takes cylinders and checksheets to loading rack.

LOADING PROCEDURE - OT

- A. Fill in first part of Loading Rack Checklist.
- B. Check and fill in "before going on car" section of Tank Car Loading Checksheet.
 - 1. Any problems, do not proceed. Contact loading coordinator or supervisor. Some problems that may occur: car numbers do not agree with checksheets, tank tests or safety valve date expired, safety valve set pressure too low, or DOT number not acceptable.
- C. Make all connections to cars. This includes sample cylinders and vapor sample tube. Check all fittings in dome for vinyl leaks; report any levels greater than 10 ppm. Complete "before loading" section of leak checksheet.
- D. Complete "after going on car" section of checklist.
 - 1. Vapor samples must be run and recorded on checklist (See Vapor Sample Procedure).
 - 2. Do not just place checks on sheet. YOU MUST CHECK items on cars and tracks.
 - 3. Ground must be indicated by ground detector.
 - 4. D160 pressure must not be above 15 psig. Check this with vinyl boardman.

LOADING PROCEDURE - OT (Continued)

E. Start loading cars.

1. Close vapor sample line to IR.
2. Close liquid to vapor line cross-tie.
3. Open vapor valves on car and rack. Leave one on the rack closed.
4. Open liquid valves on car, rack, and tank (in this order). This starts vinyl flow to car.
5. Repeat steps 1-4 for each car.
6. When 3 or 4 cars are started, call and give average loading temperature to loading coordinator.
7. Control flow to cars using circulation cross-ties. When 4 cars are loading, close one cross-tie. When 8 are started, close second one. Reverse this procedure when stopping cars. Less than 8, one cross-tie should be open. Less than 4, both cross-ties should be open.
8. Get outage settings from loading coordinator. You must load to these exact outages. More than $\frac{1}{4}$ " off either way will cause car to be over or underloaded.
9. While loading cars, complete "during loading checklist" and monitor level and pressure in each car. When pressure reaches 20 spig, catch liquid sample on car. Use liquid sampling procedure. When car pressure reaches 30 psig, call vinyl boardman, get his okay, and vent to D160 at rate to maintain 30 psig.
10. When outage level is reached, block liquid valve on rack.
11. Gas free hoses and disconnect car (see procedure for gas freeing hoses).
12. Complete "after loading" section of tank car checksheet and "after loading" section of leak checksheet.
13. Complete "after loading" section of loading rack checklist.
14. Notify loading coordinator that you are finished and return all checksheets to him.
15. Call railroad inspector out to check cars.

PROCEDURE FOR GAS FREEING LOAD HOSES (see load hose sketch)

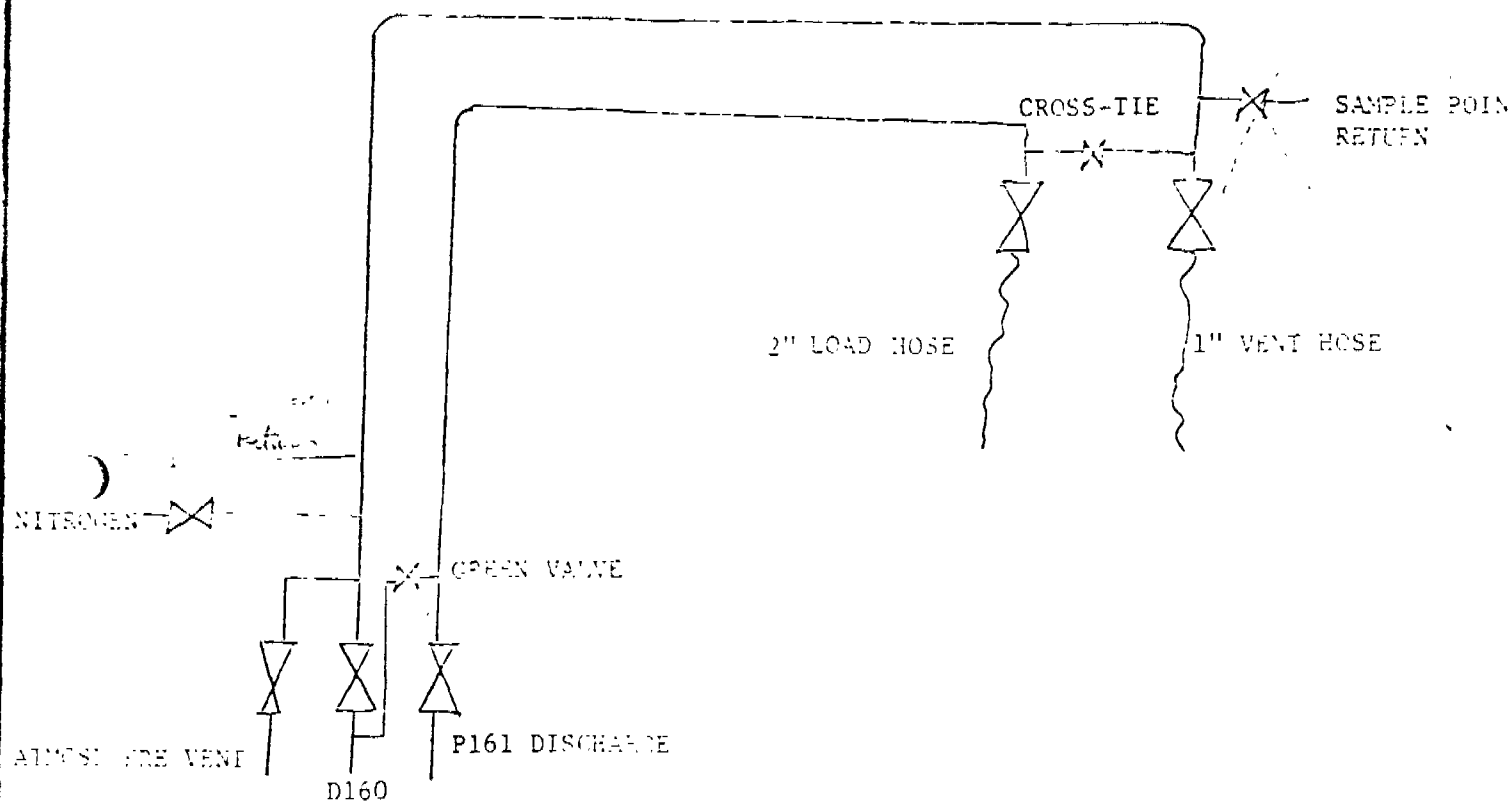
1. Purge vent hose into car with N₂. Repeat three times. Valves at handrail on vent and liquid lines should be closed.
2. Open cross-tie to liquid hose and purge it into car with N₂. Close liquid and vent valve on tank car.
3. Pressure hose to full N₂ pressure on vent to D160. Repeat three times. On fourth time, vent last 15 pounds to atmosphere.
4. Close valves on end of vent and load arms before disconnect.
5. Open bleeds on nipples.
6. Open green valve on load line to D160.

VINYL CHLORIDE TANK CAR LIQUID SAMPLING PROCEDURE

1. Connect sample cylinder to sample point on car.
2. Connect vent line to outlet of cylinder.
3. Connect N₂ to inlet and outlet of cylinder.
4. Open N₂ to outlet of cylinder.
5. Open sample valve on car, inlet of cylinder, and outlet of cylinder (in that order) to purge old sample to car.
6. Close N₂ to outlet.
7. Close vent valve on car.
8. Open vent valve on rack to D160.
9. Open vent valve on tank.

DO 139209
CONFIDENTIAL

Revised: 10/10/83



DA W 100 1 NO STATION

4/24/84

(32) Gary Donette OT
 LATERAL L, SAMPLES 100 cc/min
 15 min
 V O
 STAL C
 4-TAL C
 EDC C

(33) Gary Donette OT
 REVERSE V, SAMPLES 100 cc/min
 15 min
 V, 100% Hy/Al = 1.0?
 STAL C
 4-TAL C
 EDC C
 4/25/84

~~(34) Gary Donette OT~~
~~REVERSE V, SAMPLES 100 cc/min~~
~~15 min~~
~~V, 100% Hy/Al = 1.0?~~
~~STAL C~~
~~4-TAL C~~
~~EDC C~~

(35) Gary Donette OT
 REVERSE V, SAMPLES 100 cc/min
 15 min
 V, 100% Hy/Al = 1.0?
 STAL C
 4-TAL C
 EDC C

4/25/84

(36) Gary Donette OT
 REVERSE V, SAMPLES 100 cc/min
 15 min
 V, 100% Hy/Al = 1.0?
 STAL C
 4-TAL C
 EDC C

4/25/84

(35) 3 day Detention of
Receiving EDC Samples
100 cc/min 15 min

U, 0.0005 $\mu\text{g}/\text{ml}$ = 1.30
ETC 0.0010 $\mu\text{g}/\text{ml}$
A-Tri 0
EDC 0

(36) Ricky Pistol of
Catching U. Samples
100 cc/min 15 min

U, 0.001 $\mu\text{g}/\text{ml}$ = .26
ETC 0
A-Tri 0
EDC 0

(37) Ricky Pistol of
Receiving U. Samples
100 cc/min 15 min

U, 0.0014 $\mu\text{g}/\text{ml}$ = 3.14
ETC 0
A-Tri 0
EDC 0

4/30/84

(38) Steve Jessup
Catching U. Samples
Lock. Room
100 cc/min 15 min

U, 0.0005 $\mu\text{g}/\text{ml}$ = 1.30
ETC 0.0003 $\mu\text{g}/\text{ml}$
A-Tri 0
EDC 0

(39) Steve Jessup
Receiving U. Samples
Lock. Room
100 cc/min 15 min

U, 0.0006 $\mu\text{g}/\text{ml}$ = 1.51
ETC 0
A-Tri 0
EDC 0

4/15/57

② Ready Flipper OT
Running 500 RPM
100 RPM in 10 min

500 RPM
500 RPM
500 RPM
500 RPM

[2 3 1/2 in]

④ Ready Flipper OT
Same as 40

500 RPM
500 RPM
500 RPM
500 RPM

[2 3 1/2 in]

4/15/57

③ Ready Flipper OT
Running 500 RPM
100 RPM in 10 min
100 RPM

500 RPM
500 RPM
500 RPM
500 RPM

⑤ STEEL TESTER
Running 500 RPM
100 RPM in 10 min
100 RPM

500 RPM
500 RPM
500 RPM
500 RPM

[1.5 1/2 in]

⑥ Ready Flipper OT
Running 500 RPM
100 RPM in 10 min
100 RPM

500 RPM
500 RPM
500 RPM
500 RPM

[1.5 1/2 in]

⑦ STEEL TESTER
Running 500 RPM

500 RPM
500 RPM
500 RPM
500 RPM

[1.5 1/2 in]

C

11/6/84

(40) REP HUNTER OT
CATCHING V_1 TIE
SAMPLES
100 cc/min 15 min
OLD SYSTEM

V_1 0

THESE SAMPLES WERE
CAUGHT BEFORE THE
LINE HAD BEEN
DISCONNECTED

(41) TEST RELEASE OF
SOME AT (40)

V_1 0

7/20/84

(42) TIM MADDER OT
CATCHING V_1 TIE
SAMPLES 100 cc/min
15 min OLD SYSTEM

V_1 .015 mg/ml = 39.6 ppm

(43) TIM MADDER OT
SAME AS (42)
NEW SYSTEM

V_1 0

8/7/84

(50) TIM MADDER OT
SAMPLING V_1 TIE
OLD SYSTEM 100
cc/min 15 min

V_1 .0007 mg/ml = 1.32 ppm

(51) TIM MADDER OT
SAME AS (50)

V_1 0

(52) TIM MADDER OT
SAME AS (50)
STATION # 9
TUB - FITTING LEAK
ON TOP OF CYLINDER

V_1 .0025 mg/ml = 6.5 ppm

8/7/84

- (53) Tim Madden OT
Sampling U/T/C
New System (10-10-12)
100 cc/min 15 min

1.0

8/24/84

- (54) ~~Tim~~
Guy Blanchard OT
Breaking Down (Disconnection)
U/T/C 100 cc/min 15 min
STA # 7

- (55) Guy Blanchard OT $1.0002 \text{ mg/l} = 0.57 \text{ ppm}$
Same as (54)
Station # 8

8/26/84

- (56) Tim Madden OT
Catching U/T/C 24-75
100 cc/min 15 min
New System
STA. 117.2

1.0

- (57) Tim Madden OT 8/24/84 $1.0013 \text{ mg/l} = 3.38 \text{ ppm}$
Same as (56)
Stations 13 & 75

- (58) Tim Madden OT 8/24/84
Disconnection U/T/C
The Sample 24-75
Stations 1, 2, 10 & 15
100 cc/min
15 min

1.0

5/24/84

(50) Jim Madden CTT
Discharge Time U.T/c
100 cc/min 15 min
(Breathalyzer Down)

$$V, 1,000 \text{ ng/ml} = \boxed{1.0 \text{ ppm}}$$

7/17/84

✓ 0

(51) Scott Brownlee L.C.
Discharge Time 8:00 AM
from 100 cc/min 15 min
100 cc/min 20 min

(61) Kent Henry CTT
Senses (60)

$$V, .0023 \text{ ng/ml} = \boxed{4.50 \text{ ppb}}$$

9/29/84

(62) Jim Madden CTT
Breathalyzer Down
U.T/c 100 cc/min 15 min

$$V, .0009 \text{ ng/ml} = \boxed{2.34 \text{ ppb}}$$

(63) Jim Madden
Senses AS (62)

$$V, .0004 \text{ ng/ml} = \boxed{1.04 \text{ ppb}}$$

(64) Jim Madden
Senses AS (62)

$$V, .0004 \text{ ng/ml} = \boxed{1.04 \text{ ppb}}$$

⑤ JEFF KELLER CT
 DILUTION 1/10
 100 CYLINDERS - 15 MIN
 FPM

12.5 ppm

⑥ JEFF KELLER CT
 SAME AS ⑤
 FPM

V, D

⑦ JEFF KELLER CT
 DILUTION 1/10
 100 CYLINDERS - 15 MIN
 FPM

9/29/58

1.30 ppm

⑧ JEFF KELLER CT
 SAME AS ⑦
 FPM

V, D

⑨ RENT MOORE CT
 DILUTION 1/10
 100 CYLINDERS - 15 MIN
 FPM

1.007 mg/ml = 1.50 ppm

⑩ RENT MOORE CT
 SAME AS ⑨
 FPM

V, D

⑪ JEFF KELLER CT
 DILUTION 1/10
 100 CYLINDERS - 15 MIN
 FPM

V, D

9/24/84

(72) KENT MOODY OT
CONTAINING 1/2 G SAMPLES
NEW SYSTEM. 10000/1000 (15 min)

V. 0

(73) KENT MOODY
SAME AS (72)

V. 10010 mg/l = 2.60 ppm

(74) GREG FUENTES L.C.
SAME AS (72)

V. 10003 mg/l = 0.28 ppm