

BP OIL -- TOLEDO REFINERY

Document Type: Procedure	Area: Refinery Wide and Off Site on Company Business or in Company Owned Vehicles	Procedure No.: SAF 082
Effective Date March 31, 2015	Vehicle and Traffic Safety Policy	Rev. No.: 14
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SCOPE	This HSSE policy exists to provide for the orderly flow of traffic and parking throughout this site, to ensure that vehicles and equipment are safely operated, and to prevent injury to employees, contractors, and visitors. This policy applies to those employees operating company-owned motor vehicles or company rented/leased vehicles whether on or off site, and those operating personally owned vehicles on company business whether on or off site. This policy also apply to visitors, contractors, and any others operating vehicles on this site, unless otherwise noted. For this policy, "on-site" means any property owned by BP Toledo Refinery and includes all parking lots and the property south of Cedar Point Road.
HEALTH Special PPE & Special Hazards	A sound vehicle safety policy helps to prevent accidents. No special PPE or hazards are associated with this policy.
SAFETY	Prevention of harm to people and no damage to property.
REFERENCE DOCUMENTS	R&M Practice Driving Safety RM-P 3.7-0002 BP Group Standards Driving Safety – 2 nd Edition, Light Vehicles Safety Features, Heavy Vehicles Safety Features BP Refining Defined Practice for Control of Work SAF-044 Hot Work, Hot Work Spark Potential and Vehicle Entry
SPECIAL MATERIALS & EQUIPMENT	N/A
QUALITY	N/A
ENVIRONMENTAL	N/A

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1.0 Definitions

Hazardous Classified Locations – A location where fire or explosion hazards may exist due to flammable gases or vapors, flammable liquids, combustible dusts or ignitable fibers or flyings (API 500, section 3.2.10.4), this includes Class I, Division II.

Heavy Vehicle (HV) – Any motorized vehicle intended to transport personnel or materials with a curb weight more than 7,700 pounds, such as coaches, buses, and some larger pickup trucks. This does not include mobile equipment.

Light Vehicle (LV) – Any motorized vehicle intended to transport personnel or materials with a curb weight less than 7,700 pounds.

Mobile Equipment - Any self-propelled motorized equipment or vehicle used only within the refinery.

Permitted roadway - A road where vehicles require a Vehicle Entry Permit or a Hot Work Spark Potential Task Risk Assessment Permit to Work to enter. Roadways are permitted to help control traffic or because they are hazardous classified locations.

2.0 Vehicle and Driver Requirements

- 2.1 All BP-owned vehicles shall be fit for the purpose, and shall be maintained in safe working order, with seatbelts installed and functional. All storage and box containers on vehicles shall anchor securely to the chassis.
- 2.2 All HV's, mini-buses and similar-sized vans shall have an audible reversing alarm unless legal restriction on these alarms force an exception.
- 2.3 Each vehicle occupant shall use a specifically designed seat that is equipped with a proper seat belt. Light vehicles shall have three-point lap belts and diagonal seat belts for front and rear window seats. The number of passengers shall not exceed the manufacturer's specification for that particular vehicle.
- 2.4 All loads shall be secure and shall not exceed the manufacturer's specifications and legal limits for the vehicle. All loads being carried which project three feet or more beyond the front, rear, or sides of the vehicle shall be securely anchored and have red or orange warning flags attached. All vehicle loads shall have chains, gates or other necessary equipment as appropriate to secure them to the vehicle. Axle loadings shall be within the manufacturer's specification or the relevant regulatory limits whichever is lower. "Spotters" shall also be used if loads may encounter power lines, or if structures may be encountered that pose a potential hazard.
- 2.5 All drivers shall be appropriately licensed and trained to operate the vehicle. All drivers who operate passenger vehicles (cars and trucks) must have a valid State Driver's License. All drivers who operate non-passenger vehicles (e.g., cranes, forklifts, powered personnel lifts and vacuum trucks) must be trained and qualified to safely operate that vehicle(s). All drivers shall have a valid drivers license for the class of vehicle being operated. All drivers shall be responsible to inform their supervisor if there are any changes to their driving capability. Drivers shall be required to keep their licenses up to date.

- 2.6 All other motorized vehicles, such as powered industrial trucks (forklifts), backhoes, truck cranes, powered personnel lifts, and electric or gas carts shall be operated in a safe manner, adhering to manufacturers operating instructions and the rules of the road that apply. These vehicles must have proper seat belts, and the operator (driver) of these vehicles must wear the seat belt whenever the vehicle is in motion.
- 2.7 Motorcycles shall not be used on Company business.
- Motorcycles may be driven on Toledo Refinery roads from the main gate to designated parking lots. Motorcycles are not to be driven within the Process block area; only to and from designated parking lots. Motorcycle drivers that are going beyond the green zone must have full PPE while in transit to their designated parking area.
 - An approved motorcycle helmet must be worn by the motorcycle rider and any passengers while riding on Toledo Refinery roads.
- 2.8 Newly BP purchased or leased heavy vehicles must be equipped with the following features:
- Anti-lock Braking System (ABS)
 - Reflector strips (5 to 10 cm wide) to the rear and sides
 - Heavy duty wheel nut indicators fitted to all wheels on all axles.
- 2.9 When traveling to a foreign country on BP business, BP employees should avoid driving and consider use of alternative methods of transport. Consult the R&M Driving Safety Practice for journey risk management and to see a list of higher risk countries, as related to driving.
- Taxi's, coaches, or buses not fitted with seat belts shall only be used if no other alternatives are available
 - Avoid the use of front passenger seats when traveling in taxi's, coaches, or buses not fitted with seat belts.

3.0 Vehicle Inspection

- 3.1 All BP owned vehicles used in the refinery on a regular basis or which are part of the Toledo Refinery "fleet" shall be maintained per recommended manufactures specifications.
- 3.2 A visual inspection is encouraged to be made by the operator of any motor vehicle before operating the vehicle. Visual inspections may include, but are not limited to:
- Tires
 - All of the vehicle's glass including mirrors
 - Lights
 - Turn signals
 - Instrument panel and warning indicators
 - General body condition
 - Brakes
 - All fluid levels

NOTE: This visual inspection is not meant to take the place of a comprehensive inspection by a qualified mechanic.

4.0 Safety Requirements

- 3.3 Any vehicle that is deemed to be unsafe will be taken out of service until proper repairs can be made.
- 3.4 Cranes, cherry pickers, railroad vehicles, forklifts, and other powered industrial equipment shall be inspected before each use by the operator of that equipment in accordance with the procedures developed by the Asset Reliability department.
- 4.1 All vehicle occupants have the responsibility of ensuring the safety of everyone within the vehicle and those outside the vehicle which include pedestrians and bicyclists. No one is to get onto or off any moving vehicle, nor shall anyone ride on bumpers, tailgates, or running boards. If the motor vehicle is a truck, no one is to ride in the bed or on a flat bed. All vehicles shall have a proper seat belt for all passengers, and seat belts must be worn by all occupants of the vehicle while the vehicle is in motion. Anyone operating a vehicle shall exercise extreme caution at all times, particularly during shift change, to observe and avoid pedestrians and bicyclists.
- 4.2 Seat belt and shoulder harness shall be used by all occupants of motor vehicles whether company-owned, or personally owned when used for company business, whenever off or on-site.
- 4.3 Drivers should avoid engaging in distracting behavior while driving.
- 4.4 Satellite navigation devices shall be set and re-set only when the vehicle is safely parked.
- 4.5 Drivers shall not use mobile phones or two-way communication devices when the vehicle is in motion. Calls must not be initiated by the driver using any type of mobile phone or two-way radio in a vehicle unless the vehicle is stopped in a safe position. Passive listening to a two way radio is permitted.
- Exception 1:** Emergency Response Personnel operating in emergency capacity may utilize two-way radios while in response to operational emergencies.
- 4.6 Operators of cranes, pickers, forklifts, and other in plant vehicles shall wear seat belts while equipment is being moved.
- This seat belt requirement is not intended for construction equipment while outriggers are in the down position and the wheels are off the ground.
- 4.7 Site Asset Reliability Department will be responsible for maintaining seat belts in all BP vehicles.
- 4.8 All drivers shall be appropriately rested and alert at all times. Drivers shall stop driving or take a break when they are not fully alert.

- 4.9 Drivers shall not be under the influence of alcohol or drugs, or any other substance or medication that could impair their ability to drive.
- 4.10 A spotter should be used when backing a Heavy Vehicle.
- 4.11 Whenever a spotter is necessary, a pre-job discussion between the spotter and vehicle operator should take place to review and agree upon the hand signals to be used. The vehicle operator should immediately stop if they lose site of the spotter.
- 4.12 All vehicles will have their lights illuminated from dusk till dawn (i.e. while driving at night, pre-dusk and pre-dawn).
- 4.13 The Traffic SPA shall evaluate roads to determine which roads shall be deemed "permitted roadways." These roads shall be permanently closed and will require a permit for vehicle entry. All roads that are designated as hazardous classified locations, such as Class 1, Division 2, shall be permitted roadways. Other roads may be identified as permitted roadways to help with traffic control. Permitted roadways can be found in the map in Appendix A.

5.0 Permits for Vehicle Entry
(Class 1, Division 2 roads)

- 5.1 Vehicles entering a permitted roadway or hazardous classified area within the process block shall have a Vehicle Entry Permit or Hot Work Spark Potential Task Risk Assessment Permit to Work. See SAF044 Hot Work, Hot Work Spark Potential, and Vehicle Entry for details on required permits.
- 5.2 The Electrical Area Classification Team identified 21 locations outside of the process block that are considered Class 1, Division 2 Hazardous Locations due to potential hydrocarbon sources near an unpermitted road or rail. The following locations are listed along with their mitigation methods:
 - 1. 50th St at 60th Ave, just South of the Crude Pumps - Gas detection with local and remote alarming.
 - 2. Roadway just West of Tank 64 - Gas Detection with local and remote alarming. Traffic barriers to prevent access.
 - 3. 60th St at 52nd Ave, just South of Tank 819 - Gas Detection with local and remote alarming. Traffic barriers to prevent access.
 - 4. Roadway West of Tank 761 - Gas detection with local and remote alarming.
 - 5. Gate 27 Parking Lot, just West of Inland Pipeline Station - Vapor Barrier Wall with Signage
 - 6. Railway to LPG loading Racks. - Gas Detection with local and remote alarming.
 - 7. 30th Ave leading towards LPG Unit. And Truck Loading Rack - Gas Detection with local and remote alarming. Traffic barriers to prevent access.
 - 8. Railway adjacent to 25th Ave near Sat 6 - Gas detection with local and remote alarming.
 - 9. 32nd St South of Tank 121 - Gas detection with local and remote alarming.

10. 20th Ave West of SRU1 and 40th St South of SRU1 - Gas detection with local and remote alarming.
11. Gravel roadway North of Tank 154 - Gas detection with local and remote alarming.
12. Gravel roadway North of Tank 157/158 - Traffic barriers to prevent access.
13. Gravel roadway South of Tank 142 - Gas Detection with local and remote alarming. Traffic barriers to prevent access.
14. Gas Blender access road, at 32nd St and 22nd Ave - Traffic barriers to prevent access.
15. 40th Ave adjacent to WWTU Oil Separator Transfer Pump House - Gate Installation and traffic barriers to restrict access.
16. Perimeter Road to WWTU Bio-Pond - Gas Detection with local and remote alarming. Gate installation and Traffic barriers to restrict access.
17. 60th St adjacent to Tank 270 - Gas Detection with local and remote alarming.
18. Roadway Northwest of Tank 15 - Traffic barriers to prevent access.
19. 60th St in between Spheres 663/664 and 662/665 - Gate installation to restrict access.
20. Railway adjacent to East Flare and open areas to West and South of East Flare - Gas Detection with local and remote alarming. Traffic barriers to prevent access.

- 5.3 In the event that personnel are approaching one of these identified areas, the following shall be done if the light is flashing: Pull vehicle over to the side of the road, turn it off, walk upwind or cross wind away from the release and go to a Safe Haven.
- 5.4 Operations Response to alarms shall be as follows:
- a) Board operator will contact responsible outside operator and notify the Refinery Coordinator of alarm
 - b) Outside operator will survey the area looking for any visible gas/vapor release and close the affected roadway.
 - In the event of a gas/vapor release the Facility Response Plan shall be followed
 - Clear the area of all personnel
 - Gas test the area to verify the alarm
 - If gas detection proves to be positive isolate the leak and notify supervisor
 - If gas detection proves to be negative survey the area to see if there is equipment or material blocking the detection system
 - Clear or have cleared any equipment or material blocking the detection system, initiate work order if needed
- 5.5 Response to System Interruptions
- a) If a common trouble cannot be resolved with immediate action the roadway light may be bypassed and portable monitors may be dispatched by the area monitor technicians to work in place of the road and rail system. In the event that no portables are available or are not feasible, the road must be closed and permitted.
 - b) If planned work will block the beams of the road and rail system the same action must be taken as outlined in 5.5(a).

c) If a mechanical malfunction occurs, making the LEL alarm ineffective, an Emergency Work Order shall be written and the area monitor technicians will be called out to begin work. Section 5.5(a) must be followed in this situation. If this occurrence is off-shift the road shall be closed and permitted until the requirements of 5.5(a) are met.

5.6 Planned Testing or Maintenance of System

a) If planned testing/maintenance is taking place that requires activation of the visual alarms on the road way, MAINT-IE-001 must be followed. The Refinery Coordinator shall be notified prior to testing/maintenance starting if the system will visually alarm onto the roadway. The Refinery Coordinator is encouraged to order a radio "all call" from the EOC to notify the plant of the start and completion of such work.

6.0 Speed Limits and Signage

6.1 Drivers shall obey all applicable traffic laws of the State of Ohio (or any other state when in that state), local traffic laws and ordinances when operating a company-owned vehicle, rental vehicle, or personally owned vehicle used during company business whether on or off site.

6.2 The maximum speed limit on roads within the Refinery for all vehicles is 15 MPH (miles per hour) except in designated OM&S areas where the posted speed limit is 25 MPH. All parking areas have a designated speed limit of 10 MPH. These areas will be identified by posted speed limit signs.

6.3 Regardless of the posted speed limit, the driver is responsible for operating the vehicle at a safe speed for the conditions. (e.g. inclement weather, oversize load, detours, turnarounds, pedestrian traffic, and poor roadway surface condition).

6.4 All bicycle riders, pedestrians and other vehicles shall obey barricades and all traffic control signs.

6.5 All vehicles shall yield to Rail Traffic.

6.6 All traffic signs shall be obeyed. All traffic signs are not to be added, altered, moved, changed, or destroyed.

7.0 Emergency Vehicles

7.1 All other vehicles shall yield to emergency vehicles. 'Yield' means pull to the roadside and fully stop (for rail traffic yield means to stop without blocking vehicle crossings). All traffic shall stay clear of an emergency scene unless involved in assisting with the emergency.

7.2 Emergency Response Vehicles working in emergency capacity may enter into process area without a written Vehicle Entry Permit. Emergency Response Vehicles shall receive verbal authorization from the On Scene Commander or Refinery Coordinator to ensure area is safe to enter.

7.3 Emergency Response Vehicles, (e.g., fire trucks, ambulances) are exempted from Section 10, Parking, while at the scene of an incident, drill, or training, and performing their designated functions.

8.0 Road Closures

- 8.1 All closures of roads will be coordinated through the Traffic SPA or delegate of authority. The road closures will be coordinated and notifications will be sent out to the refinery by Security. This initiative will ensure the availability of open routes for Emergency Response Vehicles.
- 8.2 All major or main road closures that limit roads to 1 lane will have a designated "flagger" to ensure that traffic can flow appropriately. The responsible party that requested the closure of a road must provide a designated "flagger." If a designated "flagger" is not available, the responsible party is responsible to request assistance from Security. Security will provide assistance with traffic. A "flagger" will be utilized as the traffic patterns dictate the necessity of traffic control.
- 8.3 In the event that a road needs to be closed to all traffic which includes all motorized vehicles, bikes, and pedestrians; Security will be notified immediately. Designated "Red Barricades" will be deployed to ensure all personnel do not cross the barricade. Once the "Red Barricades" are no longer required, Security will be notified for removal. Security will send out notifications of the closure and re-opening of the road.

9.0 Pedestrians and Bicycles

- 9.1 Pedestrians have the right of way over vehicles and bicycles
- All pedestrians shall yield to emergency vehicles. 'Yield' means move away from the road.
 - All pedestrians shall stay clear of an emergency scene unless involved in assisting with the emergency.
 - All pedestrians shall walk on sidewalks whenever possible, or within a marked crosswalk, or near the left side of roadways facing oncoming traffic without causing unnecessary interruption to traffic flow.
 - All pedestrians shall yield to rail traffic

10.0 Parking

- 10.1 All personnel are required to park vehicles in designated spaces in the main parking lots at the entrances to buildings or process units and at the Refinery designated employee parking lots. No vehicle shall be parked in any access lane to a process unit or maintenance shop, on/across a rail track, blocking any emergency vehicle regardless of its location, or blocking any other vehicle's egress from its parked location.
- 10.2 When parking, do not block access to any fire lanes, emergency equipment, or fire hydrants.
- 10.3 Do not park within 20 feet of emergency equipment including fire monitors and hydrants unless there is a designated parking space.
- 10.4 No vehicle shall be left unattended with the motor running. 'Unattended' is defined as no operator physically in the driver's seat or passenger seat of the vehicle in a position to turn off the ignition in the event of a vapor cloud.

Exception 1: Cranes, Vac Trucks, or heavy equipment that requires a motor to be running during activities are authorized. Any special circumstances that require a deviation from 10.4 must require prior approval by the Traffic SPA.

Exception 2: Employees may exit the vehicle while the motor is running to ensure the windows are free of any snow or ice. The employee must be within the immediate vicinity of the vehicle while it is running.

Exception 3: OM&S trucks 1, 2, 3 & 4 are allowed to leave their trucks running unattended on non-permitted roadways and designated parking areas with the wheels chocked on days when the temperature is 40°F or lower with the following conditions:

- a) Vehicles must be wheel chocked.
- b) Vehicles must be identified in window to ID they are allowed to run unattended at designated areas.

10.5 The use of automatic vehicle starters are prohibited unless the employee is within the immediate vicinity of the vehicle. Employees shall not use an automatic vehicle starter while they are within any building structure.

Exception 1: The use of automatic vehicle starters are authorized at all parking areas outside the BP Toledo Refinery fenceline.

10.6 When vehicles are parked at or around process units, keys shall be left in the ignition so vehicles can be moved if necessary during a process unit emergency.

10.7 In the event that a vehicle needs to park in a nondesignated high traffic area (i.e. along side a road); hazard lights shall be turned on at all times and remain on until removed from that location.

11.0 Training Requirements

11.1 Any BP employee who operates a motor vehicle on BP Company business must have appropriate training, including defensive driving and fatigue awareness as outlined in the BP RM-P 3.7-0002 Driving Safety.

11.2 BP Workforce drivers who drive on public roads on BP business shall take part in defensive driving training and assessment within six months of commencing driving on BP business. Thereafter, workforce drivers who drive on public roads on BP business shall complete defensive driving refresher training and assessment at least every three years.

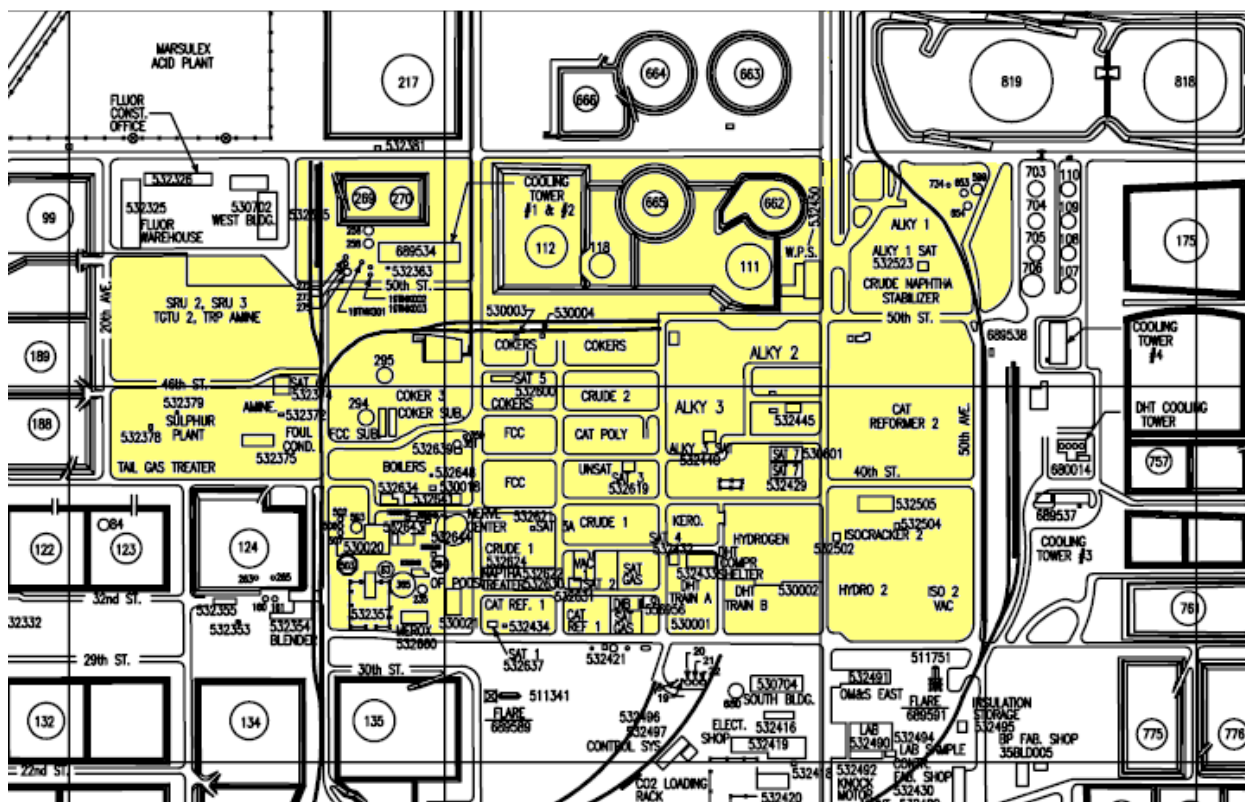
12.0 Deviations

12.1 Any deviation from these established procedures shall be approved through a Management of Change and must be approved by the Traffic SPA.

12.2 Turnarounds, Special Projects, Greenfield or Brownfield work may be exempt from specific elements of this procedure provided they have a written plan that addresses Vehicle Entry and Traffic Control. The written plan must be approved by either the Safety Team Leader or the HSSE Manager.

Appendix A

Map of Permitted Roadways



Revision History

Revision history

The following information documents at least the last 3 changes to this document, with all the changes listed for the last 6 months.

Date	Revised By	Changes
3/7/14	Myers	Added new requirements per RM-P 3.7-0002 Driving Safety – moc: M2013112-001
6/13/14	Myers	Added spotter responsibility clarification to satisfy Traction Action Item # 1159732 – Administrative Change No MOC completed.
9/17/14	Myers	Updated for new CoW terminology
3/18/15	B. Schacht	Section 10.4 Exemption 3: Omitted reference of Truck 1.5 & 3.5 per MOC action item of Reassignment of Tank Field Assistant Duties MOC # M2015767-001

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