

gasoline terminals, gasoline dispensing facilities, and gasoline tank trucks.

A. Section 24 requires bulk gasoline plants of between 4,000 and 20,000 gallons per day throughput to install a vapor balance system between incoming/outgoing tank trucks and stationary storage tanks, to fill storage vessels by submerged filling, and to incorporate design and operational practices to minimize leaks from storage tanks, loading racks, tank trucks and loading operations.

B. Section 25 requires bulk gasoline terminals of greater than 20,000 gallons per day throughput to equip each loading rack with a vapor collection system to control VOC vapors displaced from gasoline tank trucks during product loading. The vapor control system is limited to emissions of 80 milligrams or less of VOC per liter of gasoline loaded.

C. Both bulk plants and terminals are required to inspect vapor balance or loading racks and VOC collection systems monthly for leaks and to repair leaks within 15 days of discovery. Both bulk plants and terminals are restricted to loading only vapor-tight gasoline tank trucks and to loading tank trucks by submerged filling.

D. Section 26 requires gasoline dispensing facilities to install a vapor balance system, submerged drop tubes for gauge well, vapor tight caps and submerged fill loading on all storage vessels. Both sections 24 and 26 prohibit the transfer of gasoline into a storage tank or into a tank truck unless vapor balance systems are properly used.

E. Section 27 requires gasoline tank trucks equipped for vapor collection be tested at least annually for vapor-tightness and display a sticker near the DOT certification plate that shows the date the truck passed the vapor-tightness test, that shows the truck identification number and that expires not more than 1 year after the date of the test.

F. Sections 24, 25 and 26 also set standards for smaller facilities and tanks: Bulk plants of less than 4,000 gallons per month are only required to fill storage tanks or tank trucks by submerged filling and to discontinue transfer operations if any leaks are observed. A vapor balance system is not required on any tank with a capacity of 550 gallons or less at a bulk plant. However, such tanks are still subject to the requirement that these tanks be filled by submerged filling. Under section 26, dispensing facilities of less than 10,000 gallons per month throughput and certain small storage tanks are required to be loaded by

submerged fill. These smaller storage tanks are those of less than 2,000 gallon capacity constructed prior to January 1, 1979, of less than 250 gallons capacity constructed after December 31, 1978, and of less than 550 gallons capacity if used solely for fueling implements of agriculture.

*EPA's Evaluation:* The regulations listed above are approvable as SIP revisions because they conform to EPA guidance and comply with the requirements of the CAA. EPA has determined that the RACT standards are no less stringent than the applicable CTG and other EPA guidance.

*State Submittal:* Section 28 applies to any vacuum-producing system, wastewater separator and process unit turnaround at petroleum refineries. Uncondensed vapors from vacuum-producing systems must be piped to a firebox or incinerator or compressed and added to the refinery fuel gas. Wastewater separators must be equipped with covers and seals on all separator and forebays. Lids and seals are required on all openings in separators, forebays and their covers and must be kept closed except when in use. During a process unit turnaround the process unit must be vented to a vapor recovery system, flare or firebox. No emissions are allowed from a process unit until the internal pressure reaches 19.7 psia.

*EPA's Evaluation:* The regulation listed above is approvable as a SIP revision because it conforms to EPA guidance and complies with the requirements of the CAA. EPA has determined that the RACT standards are no less stringent than the applicable CTG.

*State Submittal:* Sections 29 and 32 regulate leaks from equipment in VOC service at any process unit at a petroleum refinery or at any natural gas/gasoline processing facility, respectively. Both require open ended lines and valves to be sealed with a second valve, blind flange, cap or plug except during operations requiring process fluid flow. Both require quarterly leak monitoring of pumps in light liquid service, valves, and compressors and require first attempt to repair the leak within five calendar days of discovery and with final repair within 15 calendar days. Both sections reference the leak detection method found in appendix F. Both allow less frequent monitoring of unsafe-to-monitor and difficult-to-monitor valves if a written plan that requires, respectively, monitoring of unsafe-to-monitor as frequently as practicable during safe-to-monitor periods and at least annual leak monitoring of difficult-

to-monitor valves. Under both sections, valves in gas/vapor service and in light liquid service may be monitored less frequently if the criteria of the skip period leak detection and repair provisions are met and maintained. Both sections allow certain equipment to be exempt from the leak monitoring program. These exemptions are: any pressure relief valve connected to a flare header or operating vapor recovery device, any equipment in vacuum service, any compressor with a degassing vent connected to an operating VOC control device. Also exempted from a leak detection and repair is any pump with dual seals at a natural gas/gasoline processing facility and any pump with dual mechanical seals with a barrier fluid system at refineries. Under section 29, pumps in heavy liquid service at refineries must be leak checked using the method of appendix F only if evidence of a leak is found by sight, sound or smell. Under section 32, pumps in heavy liquid service are exempted from the leak detection and repair provisions. Under section 29, pressure relief valves at refineries must be leak checked after each overpressure relief. Under section 32, pressure relief valves must be leak checked within 5 days unless monitored by non-plant personnel. In the latter case, monitoring must be done the next time monitoring personnel are on site or within 30 days, whichever is the shorter period.

*EPA's Evaluation:* The regulations listed above are approvable as SIP revisions because they conform to EPA guidance and comply with the requirements of the CAA. EPA has determined that the RACT standards are no less stringent than the applicable CTG.

*State Submittal:* Sections 30 and 31 regulate storage of petroleum liquids that apply to any petroleum liquid storage tank over 40,000 gallons capacity. Section 30 applies to tanks that are equipped with an external floating roof. Section 31 applies to tanks that are of fixed roof construction. Section 30 prohibits storage of petroleum liquid in an external floating roof tank unless the tank is equipped with a continuous secondary seal from the floating roof to the tank wall, the seals are maintained so that there are no visible holes or tears and the seals are intact and uniformly in place. Section 30 also sets design and operation and maintenance criteria for openings in the external floating roof and for gaps in vapor-mounted primary seals. Section 30 requires routine, semi-annual inspections of the roof and seal and requires annual measurement of the seal