

ILLINOIS POLLUTION CONTROL BOARD
March 20, 1980

IN THE MATTER OF:)
EMISSIONS OF VOLATILE) R78-3,4
ORGANIC MATERIAL)

SUPPLEMENTARY OPINION OF THE BOARD (by Mr. Dumelle):

On January 14, 1980 the Board received a letter from the Illinois members of the Independent Liquid Terminals Association (ILTA) requesting a clarification of portions of the Order adopted by the Board in this proceeding on July 12, 1979. ILTA feels that the Agency has misconstrued the Board's intent in adopting Rule 205(o)(3)(A) of Chapter 2. This rule lists the sources which are not required to comply with the vapor recovery requirements in Rule 205(o)(3)(B). ILTA contends that the Board had no intention of requiring vapor recovery on all organic liquids with vapor pressures over 1.5 pounds per square inch absolute (psia), at standard conditions but instead was concerned only with gasoline type products.

On February 4, 1980 the Agency filed its response. The Agency contends that the record in this proceeding does not support ILTA's position.

The rule at issue was first proposed to the Board on July 18, 1978. At that time the only petroleum liquid storage tanks (PLST's) which were proposed for an exemption from vapor recovery were those which were equipped with an external floating roof before January 1, 1979 or which had a capacity of less than 416,000 gallons. Petroleum liquid was defined as crude oil, condensate, or any finished or intermediate product manufactured or extracted at a petroleum refinery. The term "petroleum refinery" had been defined in a proposal filed on May 19, 1978 as any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

On August 28, 1978 the Board received testimony from Robert F. MacNally on behalf of ILTA. He asked that the definition of petroleum liquids be changed to exclude Nos. 2 through 6 fuel oils, gas turbine fuel oils, and diesel fuel oils to make the definition consistent with the USEPA New Source Performance Standard for Storage Vessels for Petroleum Liquids (40 C.F.R. 60K)(R.418). He also asked that a definition be added for volatile petroleum liquid as any petroleum liquid with a vapor pressure in excess of 1.52

psia at standard conditons (R.419). This change was proposed for consistency with USEPA SIP revision guidelines (R.419).

At the same hearing the Board received Exhibit 21 into evidence. Exhibit 21 is a USEPA document entitled Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks. Exhibit 21 formed the basis for the proposed Rule 205 (o)(3). In the Introduction at page 1-2 of Exhibit 21, it stated that the magnitude of the emissions from storage tanks indicated the need for broader application of the New Source Performance Standard requirements to existing tanks.

At a subsequent hearing on September 25, 1978 the Agency submitted revisions to the proposed definitions in Rule 201 which incorporated the proposals made by ILTA (Ex.60). In addition the Agency asked that vapor recovery not be required for PLST's which were equipped before January 1, 1979 with one of the vapor loss control devices specified in Rule 205(a)(2) or had a capacity of less than 40,000 gallons or had a capacity of less than 422,675 gallons and were used to store produced crude oil and condensate prior to custody transfer or were subject to the Federal new source performance standards at 40 C.F.R. 60K, or which did not contain volatile petroleum liquid.

On March 5, 1979 the Board received an amended proposal from the Agency which added another exempt category of storage tanks with a capacity of less than 378,000 gallons if used to store produced crude oil or condensate in crude oil gathering.

By this point in the record, the Agency's proposed exemptions were approaching word for word correlation with the requirements of 40 C.F.R. 60K.

On March 29, 1979 the Board adopted a Proposed Order which provided for new definitions and exempt categories precisely as the Agency had proposed them.

On July 12, 1979 the Board adopted a Final Order which adopted the revisions at issue without change.

In an Opinion adopted on August 23, 1979 the Board noted that the definition of volatile organic material, which had been the subject of extensive testimony, no longer made reference to Rule 205(o). The reason for this was simply that Rule 205(o) concerned gasoline and volatile petroleum liquids which were defined elsewhere.

The controversy presently before the Board centers on the types of liquids which are to be included in the definition of volatile petroleum liquid. While there is practically no evidence in this record to explain the definitions of volatile petroleum liquid, petroleum liquid, and petroleum refinery, a review of the record before the

USEPA when it adopted 40 C.F.R. 60K sheds considerable light.

On June 11, 1973 USEPA proposed New Source Performance Standards for seven categories of sources including petroleum refineries (40 C.F.R. 60J) and storage vessels (40 C.F.R. 60K) (38 F.R. 15406). At that time a definition of petroleum liquids was proposed as "crude petroleum or any derivative thereof". Petroleum refineries were not defined in 40 C.F.R. 60K but were described in 40 C.F.R. Subpart J as "any facility in which crude petroleum is refined, processed, or otherwise undergoes a chemical or physical change". Proposed 40 C.F.R. 60K was limited to the control of petroleum liquids with a vapor pressure in excess of 1.52 psia. USEPA was criticized for making these definitions too broad.

A three volume document entitled Background Information for NSPS: Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Secondary Lead Smelters and Refineries, Brass and Bronze Ingot Production Plants, Iron and Steel Plants, and Sewage Treatment Plants (APTD-1352 a-c) chronicles the history of these standards from initial technical reports to final promulgation. In Volume 3: Promulgated Standards (EPA 450/2-74-003), Appendix E, all of the comments are listed along with USEPA's response. Comment No. K-5 concerned the scope of the proposed definition of petroleum liquids. It stated that the proposed wording could be considered as encompassing any products made from petroleum, including petrochemicals which were not studied by USEPA. The response stated that the definition was amended in the final rule to clarify its applicability. Comment No. J-2 concerned the definition of petroleum refineries. It stated that the proposed wording could be interpreted as including oil production, facilities, gas plants, and natural gasoline plants. The response stated that the definition would be made more specific to prevent misinterpretation. In both cases USEPA adopted definitions which are virtually identical to the ones adopted by the Board.

Volume I of the three volume set (the Main Text) contains the information which USEPA used to develop the proposed standards. Technical Report No. 9 concerned 40 C.F.R. 60K (Storage Vessels). That report reveals that USEPA was primarily concerned with jet fuels, volatile crude oils, and gasolines. At page 35, the report states that vapor recovery was considered as a possible means to control emissions from the storage of all liquids with high true vapor pressures but was rejected because it was not deemed reliable in all parts of the country.

The record which USEPA used in its deliberations does not provide all the answers, but it does provide some guidance. Rule 205(o)(3) is limited in its coverage to those volatile petroleum liquids listed in the definitions which are produced at a petroleum refinery. A petroleum refinery is a facility which starts with unfinished petroleum derivatives and uses distillation, cracking, extracting, or reforming to produce gasoline, kerosene, distillate fuel

oils, residual fuel oils, lubricants or other products. These definitions were promulgated after reviewing a record based on an analysis of operations at facilities which are generally considered to be refineries. USEPA was not reviewing operations of petrochemical plants or other intermediaries. Through the course of its rulemaking, USEPA decided to rewrite its definitions to avoid the sort of controversy the Board faces here. Unless and until the Board is convinced in subsequent rulemaking that different definitions are necessary to protect air quality, USEPA's guidance will be followed. That guidance will be narrowed to specific instances in the context of permit denial appeals, should they be filed.

This Supplementary Opinion and the Supplementary Opinion dated October 18, 1979 and the Opinion dated August 23, 1979 constitute the Board's Opinion in this proceeding.

Mr. Werner dissents.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Supplementary Opinion was adopted on the 20th day of March, 1980 by a vote of 3-1.



Christan L. Moffett, Clerk
Illinois Pollution Control Board