

concentration figures used by the Agency in its calculations. Rule 205(f) allows Uniroyal to emit 8 lbs. organics/hour.

Neither of the two coating lines is presently equipped with control equipment. Uniroyal claims that until December 3, 1973 it believed that the organic emissions were in compliance with Rule 205(f). In a letter dated December 3, 1973 Uniroyal's consultant, Polytechnic Inc., was advised by the Agency that Uniroyal's exemption from Rule 205(f) was doubtful. After meeting with Agency representatives in January 1974 Uniroyal concluded that it had been mistaken in its position and corrective action would have to be taken.

Petitioner has been engaged in developing a water based spray system as a means of reducing the level of organic emissions. In May 1974 Uniroyal conducted a trial run in which full production equipment was used with a water based spray system which had already been successfully used on polyvinyl chloride (PVC) plastic materials. Although the two plastics are dissimilar, Uniroyal reports that the testing on ABS plastic was successful to the extent that the company now believes that its use of organic solvents can be reduced 62% by September 1974.

During the period from September 1974 to December 31, 1974 Uniroyal will evaluate two options for control of the remaining 38% organics--total conversion to water based coatings or installation and operation of a carbon adsorption system. If research continues to be successful, total conversion to water based coatings could be achieved by March 31, 1975. If the research is unsuccessful the carbon adsorption system would be ordered and placed into operation by September 29, 1975.

Petitioner has already ordered permanent production scale spray equipment at a cost of about \$10,000. Final testing was expected by mid-September 1974. In February 1974 Uniroyal completed testing of various samples of its emissions using a carbon adsorption system. As a result of these tests Petitioner concluded that the carbon adsorption system would be an appropriate solution to the problem. Other tests to determine composition and volumetric flow rates have also been completed.

Denial of this variance would, according to Petitioner, have several undesirable effects. Uniroyal states that it would be forced to accelerate the design and ordering of the carbon adsorption system. Design is to begin by October 7, 1974 under the present plan. It is claimed that acceleration would result in waste of those developmental costs already incurred, and any anticipated success in achieving a water based coating would be superfluous since Petitioner would be committed under an enforceable timetable to a

"noncompatible" carbon adsorption system. Cost for the carbon system at present emission rates would be \$333,990, but a carbon system to remove the organics after the initial 62% organic reduction would cost only \$130,040.

Continuing, Uniroyal states that success in developing the water base spray system without the variance would result in the "needlessly incurred engineering and design cost" for the carbon adsorption system. In addition, Petitioner would be unable to quickly incorporate a successful water based spray into its design without seeking approval from the Board for a revision of the then existing compliance plan and timetable.

The Agency recommends granting this variance but only until May 30, 1975 subject to conditions of bond, use of water based coatings to the extent possible, monthly progress reports, submission of a final compliance plan by January 30, 1975, restrictions on organic emissions after September 30, 1974 and the acquisition of all necessary construction and operating permits. The Agency has not received any complaints about this operation and no objections were received to the granting of this variance.

The Agency questions the authority of the Board to grant a variance beyond May 30, 1975 from Air Pollution Regulations which are part of the implementation plan approved by the U. S. EPA. In support of this contention, the Agency cites four recent cases involving the Natural Resources Defense Council Inc. and the U. S. Environmental Protection Agency.

It is not necessary to face that particular issue in deciding this case since we have determined that the variance should terminate even sooner than the date recommended by the Agency. Uniroyal is optimistic that it can complete development of a water based coating which can be substituted for 100% of the organic solvents. We believe Uniroyal should be given this opportunity and shall grant the variance until March 31, 1975.

Several reasons can be given for granting this variance. The Board encourages in-process changes that result in compliance. Compliance through this method enables companies to avoid unneeded and costly control equipment and this results in a saving of natural resources (i.e. steel and other construction materials, fuel to produce the adsorbing medium, fuel to regenerate this medium, power to run the equipment, etc.) and the freeing of control equipment for those industries which actually need the equipment.

Improvements in technology relating to water based coatings could be made available to other manufacturers in similar circumstances, and this would result in even greater savings of resources as well as a cleaner environment.

Finally, Uniroyal requests that the Board grant this variance without imposing any but the most minimal bond or other security to assure compliance. Petitioner asserts that, since failure to now be in compliance resulted solely from a misunderstanding and not from a willful delay or avoidance, there is no reason to believe Petitioner will not make all due progress in accordance with its intended timetable. The Agency does not contest Uniroyal's contention but nevertheless we feel that more than a minimal threat of penalty should exist in this matter and we will therefore require a \$10,000 bond.

ORDER

It is the Order of the Pollution Control Board that Uniroyal Inc. be granted a variance from Rule 205(f) of the Air Pollution Control Regulations for its Chicago plant until March 31, 1975.

1. Petitioner shall apply for and obtain all necessary permits for the installation and operation of new equipment.
2. Petitioner shall, by October 15, 1974 post a bond in the amount of \$10,000 in a form acceptable to the Environmental Protection Agency, such bond to be forfeited in the event Petitioner fails to adhere in the most practicable manner to the timetable for achieving an approximate 62% reduction in the level of organic solvent usage or fails to attempt the elimination of the remaining 38% organic solvent usage either through replacement with water based coatings or installation and operation of a carbon adsorption system. The bond shall be mailed to Fiscal Services Division, Illinois EPA, 2200 Churchill Road, Springfield, Illinois 62706.
3. Petitioner shall utilize as much water based coatings as possible in its process during the time of this variance.
4. Petitioner shall immediately notify the Agency if any deviation from the compliance timetable occurs or is required.
5. Petitioner shall submit monthly progress reports to the Environmental Protection Agency. Said progress reports shall commence on October 1, 1974 and shall state the total amount of solvents used, the nature and amount of nonexempt solvents used, the nature and amount of exempt solvents used, the nature and amount of nonexempt solvents purchased (indicating the supplier), the nature and amount of solvents purchased (indicating the supplier), the nature and amount of

water based solvents purchased (indicating the supplier), and the nature and amount of solvents in inventory at the beginning of each month.

6. Petitioner shall not allow the discharge of photo-chemically reactive materials into the atmosphere of more than 60 lbs./hr. from coating line #1 and of more than 146.3 lbs./hr. from coating line #2 after September 30, 1974 and during the term of this variance.
7. Petitioner shall submit a final compliance plan to the Environmental Protection Agency by January 30, 1975.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 12th day of September 1974 by a vote of 5 to 0.

Christan L. Moffett