

ENVIRONMENTAL PROTECTION AGENCY

[OPP-300164I; FRL-5571-8]

Cut-Roses; Request for Exception to Worker Protection Standard's Prohibition of Early Entry into Pesticide-Treated Areas to Harvest Roses by Hand Cutting**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice of exception request; request for comment.

SUMMARY: EPA's Worker Protection Standard (WPS) set restrictions on agricultural worker entry into pesticide-treated areas. The WPS established procedures for the Agency to grant exceptions to the restriction placed on worker early entry into pesticide-treated areas under 40 CFR 170.112. Roses, Inc. a rose-grower association, has requested an exception to the WPS to allow workers to harvest roses by hand before restricted entry intervals (REIs) have expired. An REI is the amount of time after the end of a pesticide application during which entry to the treated area is restricted. The exception request covers all cut-rose production in greenhouses across the United States and all pesticide products registered for use on roses. A previous exception for this industry, granted on June 10, 1994, expired on June 10, 1996. Roses, Inc. has stated that, without such an exception, the cut-rose industry cannot survive economically. This Notice acknowledges receipt of Roses, Inc.'s request and invites comment on the substance of the request.

DATES: Comments, data, or evidence in response to this Notice must be received on or before November 29, 1996.

ADDRESSES: The Agency invites any interested person to submit written comments identified by docket number "OPP-300164I" to: By mail: Public Response and Program Resources Branch, Field Operations Division (7506C), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring comments to: Rm. 1132, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA 22202.

Comments and data may also be submitted electronically (e-mail) to: opp-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect 5.1 file format or ASCII file format. All comments and data in electronic form

must be identified by the docket number "OPP-300164I"

FOR FURTHER INFORMATION CONTACT: Sara Ager, Certification and Occupational Safety Branch (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Telephone number and e-mail address: (703) 305-7666, e-mail:

ager.sara@epamail.epa.gov.

SUPPLEMENTARY INFORMATION:**I. Background****A. The Worker Protection Standard**

Introduced in 1974, the Worker Protection Standard (WPS) is intended to reduce the risk of pesticide poisonings and injuries among agricultural employees who may be exposed to pesticide residues. Revised in 1992 by 57 FR 38102, the WPS covers agricultural employees working in or on farms, forests, nurseries, and greenhouses performing hand-labor operations in areas treated with pesticides, as well as pesticide handlers who mix, load, apply, or otherwise handle pesticides. The WPS contains requirements for pesticide safety training, notification of pesticide applications, use of personal protective equipment (PPE), restricted entry intervals (REIs) following pesticide application, decontamination supplies, and emergency medical assistance.

B. Early-Entry Exceptions

In general, § 170.112 of the WPS prohibits agricultural workers from entering a pesticide-treated area during a REI. REIs are specified on the pesticide product label and typically range from 4 to 72 hours with some pesticides having longer REIs.

Under specified conditions, the WPS contains the following exceptions to the general prohibition against worker entry into treated areas during the REI:

(1) Entry resulting in no contact with treated surfaces.

(2) Entry for short-term tasks (less than 1 hour) that do not involve hand labor, to be performed by workers wearing required early-entry PPE and meeting other standards.

(3) Entry to perform tasks associated with agricultural emergencies.

Under § 170.112(e) of the WPS, EPA may establish additional exceptions to the provision restricting early entry to perform routine hand-labor tasks. The WPS defines hand labor as any agricultural activity performed by hand or with hand tools that causes a worker to have substantial contact with treated surfaces (such as plants or soil) that may contain pesticide residues. Section

170.112(e) of the WPS specifies information that must be included in a request for exception, and the process for granting an exception. When a request is received, EPA will issue a public notice and allow at least 30 days for interested parties to comment. EPA will then grant or deny the exception request based on a risk-benefit analysis as required by 40 CFR 170.112(e)(3).

C. Status of 1994 Cut-Rose Exception

On August 21, 1992 (57 FR 38102), EPA proposed to grant an exception to the early-entry prohibition for the cut-flower and cut-fern industries. On June 10, 1994 (59 FR 30265), EPA granted an exception that allowed, under specified conditions, early entry into pesticide-treated areas in greenhouses for a maximum of 3 hours during a 24-hour period to harvest roses by hand cutting. EPA denied a similar exception for cut-flower and cut-fern industries based on insufficient information to warrant an exception.

While rose growers submitted sufficient information to convince EPA that the early-entry restrictions under the WPS could have a substantial economic impact, EPA stated that it expected growers to gradually adapt to the WPS. EPA stated that this exception was granted specifically to provide cut-rose producers time to adjust pesticide spray schedules, invest in engineering controls, and develop technology and other safe alternatives to early entry. EPA believed that early entry under the terms of the exception for a 2-year period would not pose unreasonable adverse effects to rose harvesters. EPA believed that the benefits justified an interim exception during which growers would learn to adapt to the requirements of the WPS. Therefore, EPA limited the exception to 2 years, with an expiration date of June 10, 1996.

EPA noted in its 1994 decision that, if the cut-rose industry determined that the industry needed an exception beyond 2 years, the industry would need to provide additional information on the economic benefits of an exception, as well as the risks, in a new exception request under § 170.112(e)(1). In a letter dated August 1994 to Roses, Inc. the Agency stated that, in order to consider a cut-rose exception in the future, specific information would be needed on worker exposure, poisoning incidents, PPE feasibility, and data on how WPS early-entry restrictions affect the economics of rose production.

In its request to the Agency on May 16, 1996, Roses, Inc. asked EPA to extend the 1994 exception and, prior to major floral holidays, to increase the time a worker would be allowed to

perform early-entry activities from 3 hours to 8 hours in a 24-hour period. Since there was insufficient information to support the request to renew the exception and with insufficient time to administratively process the request, the existing exception expired on June 10, 1996. On June 14, 1996, Roses, Inc. requested that the Agency issue an Administrative Order that would give rose growers protection from WPS enforcement related to early-entry harvesting. Lacking both the necessary information and the time to conduct the necessary risk-benefit analysis to make a determination on worker risk, EPA declined to issue such an order. Rose growers were required to fully comply with the WPS when the 1994 cut-rose exception expired.

Through written correspondence, telephone calls, and meetings with Roses, Inc., conversations with industry and academic experts on the production of cut roses, first-hand observations in cut-rose greenhouses and discussions with growers, the Agency obtained sufficient information to support publication of this Notice of Receipt of Roses, Inc.'s request and to provide a 30-day public comment period.

II. Summary of Roses, Inc.'s Exception Request

A. Basis for Requesting a WPS Early-Entry Exception

According to Roses, Inc., without an early-entry exception allowing for harvest of cut roses two times per day, cut-rose growers will lose a significant portion of their crop. Roses, Inc. explains that commercial quality standards demand that roses be cosmetically perfect and at a bloom stage where the bud is just beginning to open. Roses, Inc. notes that, to meet such standards, pesticides must be used to control insects and disease and harvesting must occur at least twice daily to capture flowers at the appropriate bloom stage. Roses, Inc. states that cut roses that are not capable of meeting these standards have no economic value. Roses, Inc. asserts that the required twice daily harvest is not possible on days when pesticides with an REI greater than 4 hours have been applied, since the WPS early-entry restriction eliminates the possibility of a second harvest and may, depending on the REI, eliminate additional harvests for subsequent days.

B. Exception Terms Proposed by Roses, Inc.

Roses, Inc.'s request for an exception asked to continue the terms of the 1994 exception but to increase the early entry

exposure period from 3 to 8 hours in a 24-hour period just prior to major floral holidays. Roses, Inc. identified the five major floral holidays as: Christmas (December), Valentine's Day (February), Secretary's Day (April), Mother's Day (May), and Sweetest Day (October). Specifically, Roses, Inc. proposed the following terms:

(1) For all products registered for use on roses, early entry to harvest roses by hand is allowed, under the following conditions:

(a) The time in the treated area during an REI does not exceed 3 hours in any 24-hour period, (except as provided in (b)).

(b) For 2 weeks before major floral holidays, the time in the treated area must not exceed 8 hours in any 24-hour period.

(c) No entry is allowed for the first 4 hours and until inhalation/ventilation criteria on the label has been reached.

(d) The early-entry PPE specified on the product label must be used by workers.

(e) The agricultural employer must properly maintain PPE.

(f) The agricultural employer must take steps to prevent heat stress.

(g) The worker must read the label or be informed of labeling requirements related to safe use.

(h) Application specific information must be provided.

(i) A pesticide safety poster must be displayed.

(j) Decontamination supplies must be provided.

(k) Workers must be WPS trained.

(l) Workers must be notified orally and information posted regarding the exception.

(2) Exception has no expiration or, at minimum, expires in 5 years.

(Note: Terms c through l are currently required by the WPS for all early-entry work activities.)

These proposed terms and conditions are the same as those imposed with the 1994 exception, with the addition of a longer maximum early-entry time period prior to major floral holidays, and an extended effective period. According to Roses, Inc., there are five major floral holidays resulting in peak production periods beyond the normal year-round production. The holidays include: Christmas (December), Valentine's Day (February), Secretary's Day (April), Mother's Day (May), and Sweetest Day (October).

After discussions with the Agency, Roses, Inc. proposed a refinement of the terms of their request. Roses, Inc. proposed, in addition to the terms above, the following:

(1) For products with a 12-hour REI on the label, allow early entry to harvest roses under the following conditions:

(a) The time in the treated area for each worker may not exceed 4 hours in any 12-hour REI period.

(b) Conditions (b) through (l) above.

(2) For products with an REI of 24 hours or more, allow early entry to harvest roses under the following conditions:

(a) Must meet all the early-entry conditions for the 12-hour REI pesticide products listed above.

(b) During the first 12 hours of the REI period, early-entry workers would be required to wear additional PPE consisting of canvas (or similar material) arm sleeve protectors and a waterproof apron that protects the upper torso and reaches to approximately knee level.

C. Background on the Rose Industry

The USDA 1995 Floriculture Crops Report estimates the farm gate value of the U.S. greenhouse rose crop at approximately \$124 million. Roses, Inc. estimates that 200 cut-rose growers cultivate more than 15 million rose plants in the U.S. with the majority of growers located in California. Roses, Inc. estimates that the industry has 1,580 greenhouse production workers. Of these workers, 1,190 (75%) are harvesters. Rose harvesting takes place throughout the year and requires training in harvesting techniques. Roses, Inc. maintains that the turnover rate of harvesters is low.

According to Roses, Inc., rose varieties reach the harvest stage in cycles, with a single plant producing approximately 24 roses per year. Roses, Inc. explains that the commercial quality standards demand that roses be cosmetically perfect and at a bloom stage where the bud is just beginning to open. Roses, Inc. notes that, to meet such standards, pesticides must be used to control insects and disease. Roses, Inc. notes that a rose will remain at the most commercially valuable stage of bud opening for only several hours. Thus harvesting must occur at least twice daily to cut flowers that can be sold at a premium price. Roses, Inc. also states that roses which have not been cut at the proper bud stage are practically without commercial value.

Because roses have a short shelf life and cannot be stored to meet floral holiday demands, Roses, Inc. states that increased production to meet holiday demands is accomplished with prune and pinch practices. Using this labor intensive method, normal production can be doubled. Roses, Inc. requested early entry for up to 8 hours within a

24-hour period 2 weeks prior to the major floral holidays.

The major rose insect and disease problems identified by Roses, Inc. include: aphids, botrytis, downy mildew, powdery mildew, spider mites, thrips, and whiteflies. Roses, Inc. provided a list of chemicals commonly used to combat these problems. EPA requested that Roses, Inc. provide a list of chemicals, with 24- to 48-hour REIs, that the rose industry believed to be essential for their industry. Roses, Inc. identified the following 28 active ingredients as essential to the rose industry: abamectin, acephate, bifenthrin, chlorothalonil, chlorpyrifos, cyfluthrin, diazinon, dichlorvos, dinofenoth, endosulfan, fenarimol, fenoxycarb, fenpropathrin, fluralaner, iprodione, kinoprene, mancozeb, myclobutanil, naled, nicotine, piperidin, pyridaben, resmethrin, sulfotep, thiophanate-methyl, triadimefon, triflumazole, and vinclozolin. In addition, Roses, Inc. submitted a list of 15 alternative active ingredients to address resistance issues and to supplement the pesticides identified as essential.

D. Economic Impacts

Information submitted for the 1994 cut-rose exception request estimated annual revenue losses from \$22,000 to \$50,000 per acre as a result of REIs imposed by the WPS, should no exception be granted. Roses, Inc. estimated in 1994 an average annual loss of \$35,000 per acre for rose growers nationally. No new estimates or actual losses experienced between June 10, 1996, and today have been provided to the Agency. With Roses, Inc.'s 1996 estimate that the average rose grower across the U.S. has 3 acres of rose production, an average annual loss of \$11,500 to \$36,600 per acre per grower would result in a national projection of \$34,500 to \$109,400 annual loss per rose grower.

The estimated losses of \$11,500 to \$36,600 per acre are derived from a predicted loss of the equivalent of one harvest per week due to compliance with the WPS and are calculated using average July prices for selected Tea roses in California and New England. These figures appear to be based on the frequency that Roses, Inc. estimates pesticides are normally applied in rose production, the toxicity categories of the pesticides most commonly used on roses, and the asserted need to harvest roses two times per day to ensure the harvested crop will yield a premium price.

In response to the Agency's inquiry about typical spray schedules, Roses,

Inc. reported that, on average, growers reported 6.3 pesticide applications per month with an average application time of 2 hours. Roses, Inc. explained that the industry does not have typical annual spray schedules due to holistic management procedures, differing levels of diagnostic expertise, the different products available for each pest or pathogen, the difference in pests or pathogens among greenhouses, changes in weather patterns, and the different pests that may be found in surrounding agricultural fields.

In response to the Agency's inquiry regarding progress in adopting safe alternatives to early entry since 1994, Roses, Inc. noted a number of factors which influenced slower progress than expected by the industry. Roses, Inc. cited the increased cost of pesticide product development and registration as a major factor in limiting the number of new pesticides coming on the market for greenhouse roses. In addition, Roses, Inc. stated that some manufacturers do not find pursuing the registration of their materials for use on cut roses to be economically viable due to the small size of the cut-rose industry. Roses, Inc. noted that with the loss of registered products used routinely before 1988 and a limited number of new pesticides being made available for rose production, pesticide-resistant pest populations are increasing. Furthermore, Roses, Inc. states that growers do not want to rely on a specific set of chemicals, such as those with shorter REIs, because resistant pest populations will build more quickly increasing the need for new products. Roses, Inc. also states that the rose industry has new insect problems, such as the western flower thrip. Treatment for the western flower thrip also kills the predators and parasites that may have been introduced to control other pests.

EPA asked Roses, Inc. to provide information on environmental and disease control measures designed to keep rose foliage dry and prevent fungal infection. A number of pesticides identified by Roses, Inc. are intended to control fungal diseases such as downy mildew and powdery mildew. These fungal diseases begin and spread more rapidly where plant foliage remains wet or humidity is very high for extended periods. Active drying of foliage would also facilitate possible application of pesticides at times when foliage would otherwise dry too slowly. Roses, Inc. stated that, in general, these methods have either large start-up costs, are expensive to use or both.

Non-chemical pest control methods that Roses, Inc. discussed include: high

intensity discharge lighting, horizontal air flow fans, night curtains, infrared radiant heat lines, and step dehumidification. Roses, Inc. reports that the high intensity discharge lighting is not used by many growers because the cost of electricity is prohibitive. Horizontal air flow fans are widely used in the Eastern United States and less in the Southwest. Roses, Inc. states that Southwest growers are under greater financial constraints because of the expense of transporting the roses to the Eastern markets. Roses, Inc. states that growers cannot justify the expense of night curtains that prevent radiant energy loss from foliage. Infrared radiant heat lines and step dehumidification are not commonly used due to the prohibitive start-up costs. According to Roses, Inc., without such infrastructure investments, alternatives such as rearranging work schedules of harvesters or rearranging spray schedules are not viable options for growers. Roses, Inc. also states that imported roses currently hold 66% of the total U.S. cut-rose market thus reducing profits and further increasing financial constraints on the grower's ability to install physical barriers, supplemental lighting, and other environmental controls.

With current practices largely unchanged since EPA's consideration of the first exception in 1994, it is again clear that without an exception to early-entry prohibitions, rose growers are required to change their practices. EPA expects that such changes in pesticide-use patterns, harvesting, post-harvest handling, scheduling of activities, or other cultural practices will either decrease growers' revenues, increase costs, or both, thereby decreasing growers' profit at least in the short run. Given the high per acre value of rose production and the information submitted by Roses, Inc. in 1994 and 1996, EPA believes that the impacts of denying the exception at this time could be substantial. EPA needs documentation on the actual losses incurred as a result of the REIs of the WPS, since the expiration of the previous cut-rose exception on June 10, 1996. For example, commenters could present data for situations where the exception was needed in 1996 and identify the pest incident, the number of plants infected, the chemicals needed (applied), the quantity and value of cut roses lost and the length of time of the occurrence. With 3 months of data--including one of the major floral holidays (Sweetest Day)--EPA can more accurately project the quantitative

economic impacts of denying a new exception to rose growers at this time.

E. Potential Risks

Roses, Inc. reported that their growers reported applying pesticides 6.3 times per month. Roses, Inc. explained that the industry does not have typical annual spray schedules due to holistic management procedures, differing levels of diagnostic expertise, the different products available for each pest or pathogen, the difference in pests or pathogens among different greenhouses, the changes in weather patterns, and the different pests that may be found in surrounding agricultural fields.

Roses, Inc.'s May 1996 formal request sought an extension of the 1994 WPS cut-rose exception. The 1994 exception included all products used in the cut-rose industry. At EPA's request, Roses, Inc. provided a list of commonly used chemicals. Of those chemicals, Roses, Inc. identified the following 28 active ingredients as essential pesticides for controlling prevalent disease or insect pests of greenhouse grown roses: abamectin, acephate, bifenthrin, chlorothalonil, chlorpyrifos, cyfluthrin, diazinon, dichlorvos, dinofenoth, endosulfan, fenarimol, fenoxycarb, fenpropathrin, fluvalinate, iprodione, kinoprene, mancozeb, myclobutanil, naled, nicotine, piperidin, pyridaben, resmethrin, sulfotepp, thiophanate-methyl, triadimefon, triflumazoles, and vinclozolin. These chemicals have REIs ranging from 12–48 hours. In addition, Roses, Inc. submitted a list of 15 alternative active ingredients to address resistance issues and to supplement the pesticides identified as essential.

Products used in the cut-rose industry have many risk concerns associated with them. Many of the chemicals identified by Roses, Inc. as essential to production are classified by EPA in Toxicity Categories I and II, based on their acute toxicity. Acute toxicity is the capability of producing adverse effects from a brief exposure. Products containing these Toxicity I and II chemicals are assigned longer REIs in response to acute effect concerns.

Laboratory animal studies of some Toxicity Category I and II chemicals demonstrated other effects associated with long-term exposure, such as increased cancer rates, reproductive and developmental effects and effects on the nervous system. Routine repeated occupational exposures (that would occur during early-entry rose harvesting) become a greater risk concern when the chemicals can pose long-term effects. Delayed, chronic and subchronic effects are generally not reported as pesticide-related incidents

because of the time between exposure and effect.

With an average of one greenhouse production worker for every 12,000 rose plants in production, a worker could spend a substantial portion of the typical 8-hour workday cutting roses. EPA's observations of greenhouses with active rose harvesting confirmed that workers have considerable contact with plant foliage. Typically, the workers' hands and forearms touch the rose plants and there is some lesser degree of contact with their upper torso and legs. In order to prevent injury from thorns on the rose bushes, the workers usually wear a leather or other heavy duty sleeve on one arm and leather gloves. EPA lacks data to establish how much contact with pesticide-treated surfaces occurs during rose cutting.

Roses, Inc. and individual California rose growers have offered information to demonstrate that rose harvesters do not experience unacceptable risks from pesticide exposure. Roses, Inc. submitted an analysis of pesticide poisoning incidents collected by the State of California, under their mandatory reporting law. These analyses showed that few incidents involved greenhouse workers (of whom rose harvesters are a subgroup) and that for some of the incidents, pesticides were not conclusively established to be the cause. In addition, a California rose grower provided testimony that worker compensation claims by his sector were significantly lower than in other agricultural and industrial sectors, thus indicating the comparative safety of pesticide use.

The Agency regards this information as useful, but limited. In particular, both pesticide poisoning reports and worker's compensation claims capture primarily adverse effects that are the consequence of brief exposures. Neither is a completely reliable indication of the potential for delayed risks. Most agricultural worker compensation claims result from non-pesticide related injuries. Moreover, many of the symptoms of acute pesticide poisoning resemble common symptoms of the flu or colds, and these incidents may not be recognized as caused by pesticides.

IV. Comments Solicited

The Agency is interested in a full range of comments and information on this exception request. The Agency particularly welcomes comments supported by information that would contribute to a better understanding of the economic costs to the rose industry from full WPS compliance with particular regard to REIs and the risk to

workers from allowing early entry for harvesting.

By promulgating the WPS rule in 1992, the Agency made the decision that, in general, the costs of implementing the WPS were justified by the decreased risk to workers that the WPS restrictions provided. In requesting an exception for rose harvesting, Roses, Inc. argues that, in this particular industry, the costs of WPS compliance outweigh the worker risks avoided. Through public comment, the Agency is seeking information to supplement the Roses, Inc. request and to further improve the risk-benefit analysis. The information being sought is described in further detail below. Commenters are encouraged to provide comments on all or any portions of the information sought by the Agency.

A. Need for an Exception

The Agency is interested in obtaining information regarding the need for another exception and whether such an exception, if any, should be broader than the 1994 exception. The Agency would like to estimate the cost to the rose industry of complying with the REIs specified on product labeling and compare that cost to expected profit to determine economic feasibility.

Information that would be valuable to the Agency includes:

- (1) Average cost of production and annual budget information.
- (2) Estimates of the impact on yield, quality, price, revenue, and production costs per acre of cut roses when a pest problem occurs and a grower:
 - (a) Reschedules the timing of treatment application with current pesticides and/or reschedules harvesting to meet the REI requirements.
 - (b) Substitutes pesticides with products with shorter REIs and harvests twice a day.
 - (c) Uses non-chemical pest control methods and harvests twice a day.
 - (d) Experiences losses due to pests (no control) and harvests twice a day.
 - (e) Experiences losses by harvesting less than once or twice daily and not modifying treatment schedules or pesticides applied.
- (3) Need for an exception during different harvesting periods, such as prior to major floral holidays.
- (4) The shelf life of roses.

B. Risk

The Agency is also interested in information which will improve its ability to estimate the risk to the workers of increased exposure to pesticide residues during any early entry harvesting performed under an exception.

1. *Chemical list.* The Agency has not conducted an in-depth analysis of the potential risk of each of the chemicals identified by Roses, Inc. as essential. Of the chemicals identified by Roses, Inc. only one, piperalin, has been through EPA's reregistration process. EPA is interested in determining which products are needed the most, possible alternatives to these products including advantages and disadvantages, and which products' REIs are most problematic. A prioritization of chemicals needed for rose growers would assist the Agency in developing a list of chemicals that may meet the risk-benefit criteria necessary for granting an exception. If possible, typical or average spray schedules for growers will aid in identifying the most commonly used chemicals as well as aiding in estimation of productions costs.

2. *Personal protective equipment.* The Agency is interested in learning about the extent of compliance with the PPE requirements during the 2-year period of the 1994 WPS cut-rose exception. This information will assist EPA in determining the feasibility for workers to wear the required PPE. The Agency welcomes comments that address:

- (a) The length of time harvesters entered treated areas under an REI.
- (b) Whether workers wore early-entry PPE listed on the label.
- (c) If workers found the required early-entry PPE uncomfortable to wear in the greenhouse.
- (d) If any difficulties were experienced in cleaning and maintaining PPE.

3. *Worker risk.* The Agency is especially interested in information that would provide insight on the potential risk to cut-rose harvesters if an exception were granted. The Agency is interested in information that addresses all aspects of worker risk, both acute and chronic effects. This information will assist the Agency in establishing the potential risk to workers. Information sought by EPA includes:

- (a) Incidents requiring medical treatment due to exposure to pesticides registered for roses.
- (b) Exposure data for cut-rose harvesters.
- (c) Foliar dislodgeable residue data of pesticides registered for use on roses.
- (d) Any exposure studies conducted on hand harvesters of cut roses or other crops.
- (e) Any mitigation measures that have or would reduce worker exposure.
- (f) Whether workers are paid an hourly wage or piece rate.

C. Possible Exception Terms

The Agency is also requesting comment on possible terms and restrictions of any exception including their effect on the risk to workers and cost of compliance. If an exception were granted, the Agency is likely to require that the conditions of WPS § 170.112(c)(3) through (c)(9) continue to be met. These requirements include:

- (1) No entry takes place for the first 4 hours after the application and thereafter until any inhalation exposure level listed on the label has been reached or any ventilation criteria established by the § 170.110(c)(3) have been met.
- (2) The PPE required for early entry is provided, cleaned and maintained for the worker.
- (3) The required basic training and label-specific information has been furnished.
- (4) Measures to prevent heat-related illness are implemented, when appropriate.
- (5) Decontamination and change areas are provided.

EPA is considering requiring all cut-rose growers intending to use the exception to provide written notification before using the exception and to include a list of products that they routinely use to the State Lead Agency. In addition, the Agency may require cut-rose growers to keep records of date, time of application, number of workers entering the treated area and to report any incidents involving possible pesticide exposure to EPA's Office of Pesticide Programs.

The Agency would also like comment on the following possible options or restrictions:

- (1) The length of time or number of times a worker could perform early-entry hand-labor work.
- (2) If an exception greater than 4 hours is granted, a requirement that workers decontaminate and change into fresh PPE after each 4-hour period of harvesting.
- (3) An exception for all chemicals registered on cut roses.
- (4) An exception limited to specific chemicals.
- (5) An exception that could only be used a limited number of times, e.g., four times per month.
- (6) An exception that could only be used for the harvesting period prior to some or all of the five major floral holidays.
- (7) An exception that would incorporate a combination of the above alternatives.
- (8) The length of time an exception should be valid.

D. Consultations

During the public comment period, EPA is planning a meeting with cut-rose growers and harvesters that are interested in discussing key issues, clarifications and possible mitigation measures. All information obtained from these meetings will be recorded in the public docket. Information on accessing the docket is presented in Unit VI. of this document. For further information regarding these meetings contact: Sara Ager, Certification and Occupational Safety Branch (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Telephone number and e-mail address: (703) 305-7666, e-mail: ager.sara@epamail.epa.gov.

VI. Public Record

Interested persons are invited to submit written comments on this action. Comments must bear a notation indicating the docket control number [OPP-300164I]. A record has been established for this action under docket number "OPP-300164I" (including comments and data submitted electronically as described below). a public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as CBI, is available for inspection from 8 a.m. to 4:30 p.m. Monday through Friday, excluding legal holidays. The public record is located in Rm. 1132 of the Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA.

Electronic comments can be sent directly to EPA at:

opp-docket@epamail.epa.gov

Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption.

The official record for the action as well as the public version, as described above will be kept in paper form. Accordingly, EPA will transfer all comments received electronically into paper form as they are received and will place the paper copies in the official record which will also include all comments submitted directly in writing. The official rulemaking record is the paper record maintained at the location indicated above.

List of Subjects

Environmental protection,
Occupational safety and health,
Pesticides and pests.

Dated: October 24, 1996.

Lynn R. Goldman,

*Assistant Administrator for Prevention,
Pesticides and Toxic Substances.*

[FR Doc. 96-27827 Filed 10-29-96; 8:45 am]

BILLING CODE 6560-50-F