BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF PETER M. COOPER, Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondent, AND EARL W. CARLSEN and PORKY PARK FARMS, INC., Appellants.	PCHB Nos. 80-173, 81-29 & 81-30 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW & ORDER

This matter, the appeal of two regulatory orders and a state waste discharge permit issued under chapter 90.48 RCW by Department of Ecology, came on for hearing before the Pollution Control Hearings Board, Nat W. Washington, Chairman and Gayle Rothrock, Member,

convened at Ellensburg, Washington on April 29 and 30, 1981. William A. Harrison, Administrative Law Judge, presided. Respondent elected a formal hearing pursuant to RCW 43.21B.230.

Appellant Peter M. Cooper appeared and represented himself. Appellant Earl W. Carlsen also appeared and represented himself as well as Porky Park Farms, Inc., of which he is the President. Respondent Department of Ecology appeared by Charles K. Douthwaite, Assistant Attorney General. Reporter Tami Kern recorded the proceedings.

Witnesses were sworn and testified. Exhibits were examined. From testimony heard and exhibits examined the Pollution Control Hearings Board makes these

FINDINGS OF FACT

I

Appellant, Porky Park Farms, Inc. (PPF), is located in Kittitas County near Thorp. It is a modern agri-business whose product is hogs. The hogs are raised, from birth to shipping weight, indoors. Behind the walls and under the roof of a concrete-floored building encompassing 1 to 2 acres, some 3000 to 4000 swine of all ages are systematically and scientifically processed. Breeding occurs in a checkerboard of pens at one end of the building. Pregnant sows are then moved to a wing of the building where they are penned, flank to flank, in several long rows during gestation. They are moved again to birthing pens where the young are born with protection of metal bars which keep the mother-sow from rolling onto them. Plastic coated mats protect the thin skin of the new born piglets from abrasion. From

this birthing room the piglets are classified and processed further in other rooms, most being fed first at one place and then another until reaching the last room and the optimum market weight of around 200 pounds. From this room the market-ready hogs are shipped to slaughter, encountering the out of doors for the first and last time during that shipment. Conditions within the PPF building are so conscientiously clean and controlled that persons passing from one area to another must rinse their feet in detergent solution to avoid the spread of any undiscovered germs.

II

PPF bought its 135 acre site in 1976. Construction of the confinement building and placement of the herd inside occurred in 1976, also. It appears to have been the intention of PPF from the outset to dispose of the manure from its herd in two ways: by mixing it with irrigation water and spraying it onto the 106 or so tillable acres of the site and by taking some high protein solids from the liquid waste and drying them for use as a feed supplement. Although PPF inquired of Kittitas County what permits were needed to establish its business and operate a farm, a state waste discharge permit was not mentioned.

On January 11, 1979, respondent State Department of Ecology (DOE) sent an application for a state waste discharge permit to PPF requesting that it be completed. PPF submitted the application one year later in January, 1980, then withdrew it.

III

On May 30, 1980, DOE wrote its order (DE 80-343) requiring PPF to apply for a state waste discharge permit.

This order was prompted by some 15 or so complaints by PPF's neighbors regarding odor from the manure waste produced by the hogs and ponding and streaming of waste water on the farm. These complaints led DOE to investigate not only the odor but the ultimate destination of the waste (manure) being discharged. The water-mixed manure contains nutrients beneficial to the crops upon which it is sprayed. Among these is nitrogen. Nitrogen is utilized by all growing crops. The amount and rate of utilization depends upon the kind of crop, weather, soil and moisture conditions. When, however, a crop has taken a certain quantity of nitrogen, it can take no more. Any excess then descends through the soil and enters the groundwater as nitrate, a pollutant. The soil cannot filter or neutrilize nitrates as it can bacteria or other pollutants. In this case, DOE conducted samplings of the well belonging to PPF's immediate neighbor, Karla Smith, which well is about 1/4 mile from the PPF property. The tests showed nitrate readings of 2.1 PPM. The safe drinking water standard for nitrate is 10 PPM.

Photographs show that the manure flushed from the PPF confinement building was allowed to merely "pond" over an extensive area during the summer of 1980. On July 17, 1980, the water-mixed manure flowed into a drainage ditch and entered the Yakima River. Considerable odor was produced by the ponded manure. These events were not consistent

with proper management of a spray waste discharge by PPF. The quantity of waste discharged by PPF will result in disposal of some quantity of nitrate into the groundwater. This quantity will be significant because of the large number of animals (3000-4000 swine) whose waste is being sprayed onto the relatively limited acreage (106 acres).

The DOE order (DE 80-343) requiring PPF to apply for a state waste discharge permit was appealed both by PPF and by its neighbor, 1/2 mile to the southeast, Peter Cooper. PPF called for less regulation, Cooper called for more.

IV

On September 12, 1980, PPF submitted an application for a state waste discharge permit. On September 18, 1980, PPF agreed, therefore, to withdraw its appeal of DOE's order (DE 80-343) requiring it to so apply. During a pre-hearing conference conducted by this Board it was agreed and prescribed that Cooper's appeal of the DOE order DE 80-343 (PCHB No. 80-173) would be continued pending DOE action on PPF's application.

DOE granted the PPF application by issuance of state waste discharge permit No. 5533. This permit was issued first in draft form so as to allow comments from all interested persons. Both appellants PPF and Cooper were afforded an opportunity to review and comment upon the draft before the final permit was issued on January 27, 1981. Both PPF and Cooper appeal from that final permit, the former seeking fewer restrictions in its terms, the latter seeking more.

DOE also issued an order, DE 81-129, granting certain temporary relief due to inclement weather. Cooper appeals from this also. Appeals of DE 80-343, state waste discharge permit No. 5533 and DE 81-129 were consolidated for hearing.

V

In disposing of manure by spray irrigation, the groundwater is protected only when the chosen crops fully consume the nitrogen in the manure output. This leaves no surplus nitrogen or nitrates to descend to groundwater, and is known as nitrogen balance. Such a balance is imposed by the permit in question at condition S4c which declares:

> "Sprayfield irrigation will be at such a rate as not to exceed plant nutrient requirements..."

VI

Because nitrogen balance is critical to groundwater protection, the amount of manure output from a facility such as PPF's confinement building determines which cropping patterns are necessary.

The application filed by PPF specified a herd of 2220 hogs (200 pound equivalent). The waste (manure) output of such a herd produces about 234 pounds of nitrogen per acre per year. This figure takes into consideration local weather, soil, and moisture conditions. From this, standard references exist in agricultural science literature which show the nitrogen demand of virtually all crops under local conditions. The permit was issued upon the correct assumption that cropping patterns exist which will accommodate the applied-for manure output while maintaining a nitrogen balance. Selection of a cropping

pattern which maintains nitrogen balance is then the responsibility of PPF under permit condition S4c quoted above.[1] The permit in question adequately protects groundwater from the manure discharge of the 2220 hog (200 pound equivalent) herd for which PPF sought this permit.

VII

PPF challenges condition S4g of the permit which requires a new application for any significant increase in the herd above 2200 hogs (200 pound equivalent). While the PPF application contains a mathematical error which should have resulted in the proposal of a 2520 hog herd, that is not the basis of PPF's challenge now. Rather, PPF asserts that the optimum herd for its investment would be 6895 hogs (200 pound equivalent).[2] While this may be so, this permit was issued for the 2220 hog herd for which PPF applied. Doubling or tripling that herd necessitates another application or amendatory application to DOE, allowing review of increased manure output and establishment of nitrogen balance requirements. A permit for an enlarged herd cannot be issued until applied for, nor is PPF barred from applying. Whether or upon what terms a future permit will issue is not now before us.

---

1. The PPF application contains crop rotations (Exhibit R-4, page 14) which were chosen to assure that the nitrogen in the given manure output would not fall short of the amount needed for vigorous plant growth. Use of these crop rotations is subject to the groundwater protecting language of condition S4c that the manure output not exceed the crop's requirement.

2. Exhibit R-133B shows an optimum scale of 9740 hogs (142.6 pound equivalent) which is 6895 hogs (200 pound equivalent).

VIII

PPF challenges the limitation on wastewater flow found at S1 of the permit. Wastewater is defined as manure and flush water measured at discharge from the confinement barns. PPF urges that only the manure content is relevant to pollution control and that wastewater flow is therefore irrelevant. In fact, PPF's own permit application (Exhibit R-5, page 1) uses wastewater flow as an indicator of the nitrogen (and thus manure) output. The S1 wastewater limitation also correlates with that used in calculating nitrogen output in the PPF application. The S1 limitation of wastewater flow is an appropriate means of gauging manure output and is relevant to groundwater protection.

IX

The storage lagoon is dug in clay soil. The water-mixed manure stored there, by all expert estimates, will be self sealing. Leakage from the storage lagoon to the groundwater, is therefore, not likely. The same is true of the mixing lagoon.

X

The discharge of manure waste by spray irrigation represents recognized good practice and procedure to reduce odors to a reasonable minimum when discharged according to the permit in question. Such discharge will not be odor free and no present, practical means was shown to make it so.

Ponding of water-mixed manure, a significant cause of odor in the past, is prohibited by condition S4c of the permit.

XI

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such.

From these Findings the Board comes to these

CONCLUSIONS OF LAW

I

Appellant, PPF, while represented by counsel, withdrew its appeal of DOE's order requiring it to apply for the type of waste discharge permit now before us (one issued under RCW 90.48.160). Appellant, PPF, applied for that type of permit. The propriety of requiring that type of permit was not reserved as an issue in the prehearing order nor argued at hearing. Accordingly we do not decide the propriety of requiring such a permit but proceed to review the challenged terms of the specific permit before us.

Such a waste discharge permit issued under RCW 90.48.160 must be conditioned to control or avoid pollution. RCW 90.48.180. As issued, the PPF permit before us contains conditions 1) imposing a nitrogen balance to protect groundwater (condition S4c); 2) requiring well monitoring to assure that the theory of nitrogen balance is working in practice (condition S1); 3) imposing a holding lagoon (condition S4d) and preventing "ponding" (condition S4c) to protect surface waters from incidental runoff of the sprayed wastes. These and the other permit conditions are appropriate and adequate for protection of waters of the state from pollution as required by RCW 90.48.160

and .180.[3]

The waste discharge permit requires the use of all known, available and reasonable methods to prevent pollution of waters of the state as required by RCW 90.48.010 and WAC 372-24-100. As a consequent benefit, in this case, odors will likely be controlled to the same degree by this permit as would be so under WAC 173-400-040(4) requiring recognized good practice and procedures to reduce odors to a reasonable minimum.

The permit issued by DOE to PPF is consistent with the portions c the State Water Pollution Control Act cited by the parties.

II

The permit issued by DOE to PPF is exempt from the threshold determination and EIS requirements of SEPA, chapter 43.21C RCW, because of DOE's rule implementing SEPA, WAC 197-10-175(9)(a), which provides:

> (9) Department of ecology. The following activities of the department of ecology shall be exempt:
>
> (a) The issuance, reissuance or modification of any waste discharge permit which contains conditions no less stringent than federal effluent limitations and state rules and regulations. This exemption shall apply to existing discharges only and shall not apply to any new source discharges.

---

3. Contrary to PPF's contentions, DOE should not bear the cost of monitoring wells where, as here, such monitoring is a proper condition of the permit. RCW 90.48.250. Also, condition S4h requiring review which could result in termination or modification of the permit is subject to the usual statutory standards, RCW 90.48.190 and .195, so that the grounds for this review by DOE are clearly set forth, though PPF contended otherwise.

PPF's discharge was "existing" on the effective date of this version of the regulation, 1977, having begun in 1976. Appellant Cooper urges that the term "existing" must be read to mean "existing permitted." We disagree because such a reading would render the word "issuance" superfluous were the exemption only available to "existing" permitted discharges. No other meaning of the word existing was argued by the parties.

The permit is therefore not invalid for failure of SEPA compliance.

III

The permit issued by DOE to PPF is limited to wastes discharged by a herd of not significantly more than 2200 hogs (200 pound equivalent). Discharge from a significantly greater herd will require a further application and permit. (Condition S4c, which is consistent with RCW 90.48.160.) See also RCW 90.48.170 relating to public notice of such application for increase in volume.

IV

State permits to discharge into state waters have been required since 1955. RCW 90.48.160 first added by Laws 1955, ch. 71 section 1, p. 425. As science discovers that certain activities are resulting in discharges to state waters so that permits are required, a maximum effort should be made by government to inform the public. In rules adopted by DOE to implement the requirements for waste discharge

permits it states:

> By making application for a permit early in the planning stages for a new industry the necessary requirements can be definitely established and facilities provided in the initial construction. WAC 372-24-020(3).

This rule, with which we agree, would be greatly enhanced by maximum public notice that a given operation is required to obtain a state waste discharge permit, among the other permits which it may ed. To this end we suggest the following two actions by DOE:

1) amendment of WAC 372-24-040 to specifically describe those <u>animal feeding operations</u> such as PPF which require (or may require) a state waste discharge permit.

2) that such WAC 372-24-040, as amended, be brought to the attention of the building or other county official by each DOE regional office, and that written notices or brochures be provided to counties and health districts. While the absence of such action in this case does not change the result, such an effort would serve the best interests of everyone concerned in the future.

V

We have reviewed the other contentions of the parties and find them to be without merit. The permit issued by DOE to PPF has not been shown to be improper and should be affirmed.

VI

Any Finding of Fact which should be deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions the Board enters this

ORDER

Waste Discharge Permit No. 5533 and Orders DE 80-343 and DE 81-219 by the Department of Ecology issued to Porky Park Farms, Inc., are hereby affirmed.

DONE at Lacey, Washington this 13th day of July, 1981.

POLLUTION CONTROL HEARINGS BOARD

Nat W. Washington

NAT W. WASHINGTON, Chairman

Gayle Rothrock

GAYLE ROTHROCK, Member