ILLINOIS POLLUTION CONTROL BOARD May 3, 1971

Hardwick Brot	hers Co	mpany)		
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V.)	PCB	71-17
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Environmental	Protec	tion A	Agency)		

Opinion of the Board (by Mr. Kissel):

Hardwick Brothers Company (Hardwick) filed a petition for variance with the Pollution Control Board on February 8, 1971, and an amended petition with the Board on March 30, 1971. Hardwick asks in its petitions for a variance from the existing law and regulations to allow open burning of trees and wooden underbrush over the period of the next year. The Environmental Protection Agency (Agency) recommended that the petition for variance be denied because the Environmental Protection Act (Act) contains a clear prohibition of open burning. See Section 9(c) of the Act. A hearing on the petition was held in Harrisburg, Illinois on April 8, 1971 before hearing officer Patrick J. Hughes, Jr.

[THE FACTS]

Hardwick is a partnership, located in Beardstown, Illinois, whose principal business over the last 45 years has been "river contracting". This work, which they have performed in hundreds of jobs during the past years, consists of moving earth for the straightening of streams and clearing those areas in building drainage structures. Presently, Hardwick is the contractor of the Army Corps of Engineers (Corps) under contract number DACW27-71-D-0047 which involves the straightening and snagging of the north fork of the Saline River (R.17). The project will begin at the southerly end of the Saline River near Elba and will proceed six miles north. Essentially, Hardwick will dredge and straighten the river, dispose of the spoil which comes from the bottom of the river and clear the area of all underbrush and trees. When Hardwick is through with its work on the River, the River will be straighter, deeper, and will be much less foliated than it is at present. In addition Hardwick will put rip-rap on above and below the normal water line to prevent erosion of the river bank. In performing its job, Hardwick will use two large drag lines to dredge the river, along with bulldozers, bush hogs and chain saws to cut the underbrush and trees. The drag lines, which are each "seven years Bucyrus Erie lines" (R.21), will be physically dragged along the bottom of the river. These huge buckets (one on each side of the stream) will pick up the silt from the bottom of the river and deposit the "spoil" on the bank within the right of way provided by the Corps which is 400 feet (150 feet on each side of the stream and approximately 100 feet stream width upon completion of the project). The project must be completed, according to the terms of the Corps contract, by September 1, 1972. For each day after that date the project is not completed, Hardwick must pay a penalty to the Corps of \$125 per day.

Hardwick's principal problem is what to do with the underbrush and the trees (the "debris") which will be uprooted as a result of Hardwick's activities under the Corps contract. Originally, according to the Hardwick witnesses, Hardwick believed that the underbrush and trees would be buried on the right of way site. While there is some confusion in the record, Hardwick apparently assumed that there was sufficient room on the right of way to bury the debris and the spoil, and Hardwick's bid was made on that basis. An explanation of the bidding and bid documents is necessary.

The Corps asked for bids sometime earlier this year (the date is not given in the record) and the potential bidders were given thirty days within which to submit their bid. Hardwick witnesses said that really the bid had to be prepared within 20 days because bid bonds must be obtained (as a practical matter) before the bid is reviewed and compiled. The Corps bid documents provided that the debris burying would be allowed on the right of way, and in fact, set specifications as to how the debris would be buried. But this contract document of the Corps apparently did not absolutely assure the bidders that the debris could be so buried. Further, the contract documents did not contain the exact quantity of material which would have to be disposed of, but did give the exact length of the project and width of the right of way, (actual aerial photographs of the river were among these documents). Without the specific direction of the Corps that the debris would have to be hauled away instead of buried on the right of way, Hardwick assumed that there was sufficient amount of right of way to bury the debris. (R. 29, 61) This assumption was apparently made by others, as well, who bid on this job because the record shows that the bids made by others were close in amount to the Hardwick bid on the clearing and disposal of debris. Hardwick's bid on this part of the project was \$185,680. While Hardwick knew the length and width of the right of way, which is a key fact in making the determination as to when the debris could be buried, and could estimate from the aerial photographs the amount of underbrush and trees, it did not show the quantity of excavation (R.63). (It is apparently the custom in bidding on projects of this kind to bid without knowledge of that quantity.) According to Hardwick, the only way that to have determined whether debris and the spoil could be buried in the right of way would have been to cross-section the project. "Cross-sectioning" is the process of measuring ground level by the use of actual surveys and mathematical calculations. This is apparently a time consuming job which could not have been completed during the 30 day period before Hardwick's bid was submitted. After Hardwick received the contract, it did, in fact, "cross-section" the project, and after the cross-sectioning was completed, Hardwick concluded that the debris could not be buried on the right of way. An Agency witness indicated that the computations could have been made from the information given by the Corps, but by his own admission he did not in his quick calculations include all of the elements necessary to make an accurate calculation.

[ALTERNATIVES TO BURYING]

There are alternatives to burying the debris on the right of way -- 1) burning of the debris, 2) chipping and hauling the debris, and 3) not removing the debris. We must examine each of the alternatives.

[1. NOT REMOVING THE DEBRIS]

There was some testimony in the record which indicated that Hardwick could perform its contract with the Corps without removing any of the underbrush or trees. This seems impractical, and Hardwick could not perform its agreement without the removal. Large equipment such as the drag line and the bull dozers could not be operated if the trees and underbrush were not removed. Also, the Corps wants the banks stripped of the debris so as to allow the quicker movement of water through the area. The removal is part of the agreement, and if the contract is to be satisfied, it must be done.

[2. CHOPPING & HAULING]

The debris could be hauled to another site and buried there. The detriment in doing this, as far as Hardwick is concerned, is the cost. Uncontradicted testimony demonstrated that the cost of clearing the debris, chipping some, hauling some and selling some would be a total of \$446,000. (R. 81-2) The fair market value of the debris that could be sold was estimated at \$49,500. These costs and credit would amount to an additional expenditure by Hardwick (over the amount actually bid to dispose of the debris in the original contract) would be \$210,931.44. (Testimony on the substantiation of these costs was presented in detail and can be found in the record pages 81 to 94.) In addition, the hauling of the debris would extend the time for completion of the project because the trucks, which would haul the debris away, could not reach the banks of the river at certain times of the year. The soil would be too soft. Delay would subject Hardwick to penalties under the contract.

[3. BURNING OF THE DEBRIS]

Disposal of the debris by open burning could be accomplished. The debris would be put in a wind row, which is a continuous pile along one side of the river. The pile would be 20 to 30 feet wide and about 8 feet high. The debris would have to be bulldozed into this pile. Burning would take place one day per week for 12 hours on that day, and would continue for a period of one year. During each day of burning, Hardwick would burn 1500 feet of the row of debris. No oil or other contaminants would be needed to start the fire or keep it going and the burning would only take place during the daylight hours when the wind was more than 15 mph from the west. Even using the open burning there will be some delay in completing the project, thus adding to the possibility that penalties will have to be paid.

[THE VARIANCE]

Now the question of whether the variance should be granted. In order for a petitioner to be granted a variance by the Board he must prove that compliance with the law will create an arbitrary or unreasonable hardship. (Section 35 of the Act.) This Board has consistently held that the question of determining whether an arbitrary or unreasonable hardship exists is determined by a balancing process, that is, balancing the benefits to the petitioner and the public in granting the variance versus the harm to the public and the petitioner in denying the variance. We have often said that this is not an equal balance, rather the benefits to be obtained by the public and the petitioner must be significantly greater in allowing the variance, than the harm caused by denying it. This case poses a difficult problem in that regard. Open burning has been outlawed in this state for a great many years, and this ban was reaffirmed by the Illinois legislature when it passed the Act. See Section 9(c) of the Act. Further, this Board has held to the position that variances will only be granted if the petitioner has a specific program for reducing emissions over a reasonable period of time. See Mt. Carmel Public Utilities Co. v. EPA, PCB 71-15. In this case Hardwick has no program as such, except to manage the open burning so that it will have a minimal effect on the people in the surrounding area. Still, weighing all factors, we believe that the variance should be granted under conditions which will be outlined.

To not allow the variance, as conditioned, in this case would pose a hardship on Hardwick without a significant benefit to the public. The only viable alternative available to Hardwick known to the Board at this time is to haul the material from the site, and dump it somewhere else. The cost of this to Hardwick would be over \$210,000. This amount represents three times the amount of profit that Hardwick expects to realize on the Saline River project, and, according to one of the partners of Hardwick, the company is not in a position to sustain such a loss. If the loss were imposed on the company, it would go out of business. This would not only have an impact on the company and its employees, but also would severely affect the completion of the Saline River project. While this Board does not by this decision condone (or condemn) the use of dredging and straightening rivers as solutions to problems, still the testimony in the record by the head of the local conservancy district was that there is a mosquito and flooding problem caused by the River in its present condition. of that project is simply not worth the relatively minor impact on the environment of the open burning proposed by Hardwick. this Board does not believe that all of the possible alternatives to open burning have been adequately explored by Hardwick. Therefore, the variance will be granted until September 1, 1971, at which time it will expire. On or before August 1, 1971, if Hardwick wishes this Board to extend the variance, Hardwick will file with the Board and the Agency a written report on the following:

- 1. The possibility of the acquisition of additional right of way. During the ensuing months, Hardwick should make contact with the Corps to determine whether additional right of way can be made available so that the debris could be buried there. If additional right of way is available, at any time in the near future, the debris could be buried, which would satisfy everyone.
- 2. The use of an "air curtain" in burning. One of the new methods for controlling open burning which has come to the knowledge of this Board is the "air curtain." This device, testified to in the Board's hearings on the Open Burning Regulations, R70-ll is a device which forces air into the burning site causing better combustion and very little, if any, smoke. Hardwick should investigate the possibility of, and the economics in, using the "air curtain" in its burning.

During the variance period, the burning will be done under specified conditions. The burning will be done one time per week, during the day time hours when the wind from the west is greater than 15 miles per hour. No contaminants will be used to start or keep up the burning. The area surrounding the area of the burning is sparsely populated. There is not a concentration of population within four miles of the project site. There are people apparently living on farms in the area, but there are only 10 persons per square mile, which is few indeed. It is hard to imagine that anyone or anything will be affected to such a degree, so as to require this Board to deny the variance, thus putting this company out of business and delaying the project. The alternatives presented in the record are too costly for the harm that will be caused. It may be that after receiving the written report of Hardwick, as required in this opinion, other alternatives will present themselves, and will be required by this Board.

One of the factors which influenced the decision of this Board is that Hardwick does not choose open burning as the first alternative. Over and over again in the record, the witnesses for Hardwick made it clear that the company would rather bury the material in the right of way. But from what we know, sufficient right of way is not available. Additional right of way may be available. If it is, Hardwick would prefer to use it as we would.

One additional issue must be discussed. This case is the first one presented before the Board regarding the projects of the Corps in straightening and deepening Rivers. It is the first time the Board has been faced with the decision to allow burning because a contractual agreement (between the Corps and Hardwick) did not anticipate that sufficient room wasn't available to bury the debris gained from the project. While the Board is inclined in the case of first impression to grant the variance under certain conditions because of the hardship imposed on Hardwick and little effect on the surrounding area, the Board may not be so inclined in the future. We feel that in future

projects of this kind it is incumbent upon the Corps to assure the contractors that sufficient right of way is available to bury the debris. We feel that the burden should be on the Corps to do this investigation and make this assurance because the Corps has the time, prior to putting the project out for bid, to completely cross-section the site for each project. The contractors only have between 20 and 30 days to bid on the job and, according to the testimony, this is insufficient time to make the necessary exact evaluations as to whether sufficient right of way is available. From this time, contractors who bid on these projects should, notwithstanding the prior custom and practice of assuming that sufficient right of way is available to bury the debris, not bid on projects on which the Corps has not detailed this information. To do so, may mean economic losses to that contractor because this Board may not be as lenient in future cases as it must be in this one.

The petition for variance is hereby granted under the conditions outlined in the order, below.

This opinion constitutes the findings of fact and conclusions of law of the Board.

After consideration of the testimony and exhibits in this case the Board hereby orders the following:

- 1. The petition for variance of Hardwick is hereby granted and Hardwick is hereby allowed to conduct open burning of trees and underbrush gathered as a result of its work on the straightening and dredging project on the north fork of the Saline River under the following conditions:
 - a. The burning shall be conducted on only one day per week, during the daytime hours;
 - b. The amount of the burning shall be limited to the amount stated in the record, that is, the wind row shall be no greater than 30 feet wide and 8 feet high;
 - c. The burning shall be supervised by sufficient personnel so as to prevent the fire from spreading beyond the wind row;
 - d. Nothing other than trees and underbrush taken from the Saline and its banks shall be burned;
 - e. No oils or other contaminants shall be used to start the burning, or keep it going; and
 - f. Hardwick shall make a reasonable effort to bury the trees and underbrush on the right of way.

- g. Hardwick shall bury the ashes resulting from the burning of debris, so as not to cause any harmful effect on the River.
- h. This variance shall continue until, but not after September 1, 1971, unless further extended by this Board.
- 2. Hardwick shall advise the Agency in writing on each occasion when burning has occurred. Such report shall contain information concerning the day on which the burning occurred, the time during which burning occurred, the amount and the identification of material burned, and the efforts made by Hardwick to bury the material on the right of way.
- 3. Hardwick shall, on or before July 1, 1971, file a written report with the Board and the Agency detailing its investigations, and conclusions on the following:
 - a. The possibilities of, and economics in acquiring additional right of way on the Saline River Project; and
 - b. The possibilities of, and economics in, using an "air curtain" device in the burning.

The Agency shall review the report filed by Hardwick and make written recommendations concerning the report to the Board within 15 days after receipt of the report.

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above opinion this 3rd day of May, 1971.