ILLINOIS POLLUTION CONTROL BOARD September 16, 1971

Willow Creek Drainage District) of Morgan County, Illinois) v.) Environmental Protection Agency)

Opinion of the Board (by Mr. Kissel):

On June 1, 1971 the Willow Creek Drainage District of Morgan County, Illinois (the "District") filed a petition for variance to allow it to carry on open burning of landscape waste, including brush and trees, on and immediately adjacent to the improvements within the District, for 300 days following the commencement of a project within the District. In support of the petition the District filed not only the Petition for Variance, but other documents including a Supplemental Affidavit requested by the Board. The Agency filed its recommendation on August 5, 1971. Because of the fact that precedent for this kind of case has already been established, the Board felt that a decision of this matter could be made without a formal hearing.

The District is a duly organized municipality of the State of Illinois under the Illinois Drainage Code and is administered by three duly appointed Commissioners. It is composed of about 4,300 acres of river bottom farm land adjacent to Willow Creek in Morgan County, Illinois. In the past several years a substantial portion of the land within the District has been flooded and saturated with water due mostly to siltation in the drainage ditches and the accumulation of trees and brush within the District drainage ditches and levees. Recently (and the prime purpose for the variance petition herein filed) the District initiated an improvement program consisting of the removal of trees and brush which impede the flow of water within the levees, dredging of the drainage ditch channels, strengthening and building of levees and reseeding of levees. Final plans and specifications for the project have been completed, construction bids have been received and the low bids have been tentatively awarded by the District. The entire project has been approved by the Circuit Court of Morgan County and the Court has approved the Assessment Roll, all without objections from the landowners in the District. The construction bids submitted were based on the fact that the contractors could burn the cleared material on the site. The landscape waste on the site includes the following:

Thirty-six (36) acres of brush and trees, none over thirty (30) years in age, in a strip lying in an east-west direction west of Towhead Road Bridge and being 4,400 feet in length.

Fifty (50) acres of brush and trees, none over thirty (30) years in age, in a strip lying in an east-west direction between Towhead Road Bridge and Highways 100 and 67 and being 6,300 feet in length.

Twelve (12) acres of light brush and trees, none over thirty (30) years in age, in a strip lying in an east-west direction east of Highways 100 and 67 and being 4,800 feet in length.

The proposed method of disposal of the landscape waste is described in the petition for variance as follows:

"The wood and underbrush would be piled and distributed at intervals along the right-of-way of said project. Approximately once each week the accumulated piles would be ignited at 6:00 o'clock A.M. The burning would be substantially completed at or before 6:00 o'clock P.M. on the same day. There would be no noxious or toxic or objectional gases or odors generated or emitted other than those normally associated with the burning of natural wood and brush. The burning would take place only when the winds are from the westerly half of the compass. The burning shall be supervised by sufficient personnel so as to prevent the fire from spreading beyond the wind row. Nothing other than trees and underbrush taken from Willow Creek, its banks, berms and levees shall be burned. No oils or other contaminants will be used to start the burning or to maintain

combustion. Burning sites will be selected to prevent the resulting ashes from causing any harmful effect on Willow Creek and the Illinois River. All burning will be completed over a period of time not to exceed 300 calendar days. Days of maximum dispersion weather conditions will be selected for the weekly burnings. Standby equipment and procedures would be established to arrest burning at any time it did not comply with the terms of any Variance allowed."

Alternative methods of disposal were investigated by the District and a report of these is contained in the Supplemental Affidavit of Robert H. Benton, an engineer for the District, as follows:

"(a) Burial between the levees: The volume of material is so great that the burial of same would create large areas of unstable material close to the base of the levee embankment, which would jeopardize the stability of the levee. Also, the volume of material is so great that the water carrying capacity of the ditch between the levees would be materially reduced.

(b) Leaving debris between the levees without burial: Again because of the volume of waste, this would materially impede the flow of waters, would cause blockage of water and could cause damage to levees and increase the possibility of flood damage to adjoining agricultural land. This method would nullify the benefits of the project.

(c) <u>Burial outside the levee</u>: This would cause damage to the levees by moving the cleared waste over and across the levees. Burial near the outside bank of levee would create the same unstable conditions as would burial between the levees. Burial outside of and away from the levees would disturb the fertility and topography of productive farm land; leaving the burial site permanently damaged and disrupting existing drainage.

(d) Leaving waste outside of levees: This method like (c) would cause damage to levees in moving material over the levee; would also affect drainage of the land; would require taking farm land out of production.

(e) <u>Chipping, hauling and burial</u>: As set forth in my first affidavit and exhibit thereto attached; this method would be too costly, increasing the costs of the project by some \$48,130.00. (See first affidavit).

(f) <u>Air Curtain Destructor</u>: The prevailing water table in the general area is such that the required pit excavation would accumulate a substantial depth of water, thereby making burning impossible. Also, the character of the soil and the high water table would render the walls of the pit excavations unstable.

Further investigations made by the undersigned discloses that in such situations the only alternative is to construct a cement receptacle or bin or an earthen receptacle of compacted soil fill with earthen sides. In either event after burning these structures would have to be removed from inside the levees. Such installation would be prohibitive in costs. My investigation disclosed that this method has been used only once on the East coast and that in other situations with similar water table and soil conditions the air destructor method was either not recommended or used. Companies contacted were Thomson Culvert Co., of Hazelton, Missouri and Dirall Driers, Inc. of Attica, Indiana."

This Board has considered an almost identical case in the recent past. See <u>Hardwick Brothers Company v. EPA</u>, PCB 71-17, dated May 3, 1971. In that case the Petitioner was under contract to deepen a channel of a river and to rid the channel and the embankments of underbrush. After an examination of all the alternatives, this Board decided that open burning was the only feasible alternative which would not impose an arbitrary or unreasonable burden on the petitioner. The same is true in this case. Here the burning will be done away from residential areas and will seemingly not affect any people, and the costs of alternatives to open burning are unreasonably expensive when balanced against the little, if any harm, which will be caused by the burning itself. Under these circumstances, the Environmental Protection Act dictates that a variance from the prohibition contained in the Act be granted. While the variance will be granted, there will be conditions imposed which will guarantee the minimum effect on the environment. These conditions were recommended by the Agency in its formal recommendations where it suggested to the Board that the variance be granted. These conditions are outlined in the order below.

ORDER

After consideration of the documents filed in this matter, the Board hereby grants the petition for variance filed by the District and the District is hereby allowed to conduct open burning of trees and underbrush gathered as a result of Willow Creek drainage project under the following conditions:

1) The waste to be burned shall be moved within the levees to a minimum number of locations and not less than 1/4 mile from the few nearby homes.

2) Burning shall be conducted only when the wind is from the southwest at 5-20 miles per hour and the sky is not overcast.

3) No fuel lesser than a number two fuel oil shall be used to promote combustion.

4) Petitioner shall notify Agency on days when burning is to occur prior to such burning.

5) Petitioner shall file a brief report with the Agency following the final burning, describing each burning. Each description should include the approximate amount of materials burned, the dates and time of burning, the total duration of burning, the estimated smoke emission and a description of the weather conditions.

6) The variance granted herein shall expire 300 days from this date and no burning shall be conducted thereafter.

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above Opinion and Order this <u>// day of <u>//// (a)</u>, 1971. Regina <u>B. Ryan</u></u>