# BEFORE THE WATER RESOURCES DIRECTOR OF OREGON

LANE COUNTY

R-64817, 64818 AND G-10841 IN THE NAME
OF METROPOLITAN WASTEWATER MANAGEMENT COMMISSION FOR STORAGE AND USE
OF WASTEWATER AND USE OF GROUND WATER

IN THE MATTER OF PENDING APPLICATIONS

STATEMENT, FINDINGS OF FACT, CONCLUSIONS & ORDER APPROVING APPLICATIONS

### STATEMENT

The Metropolitan Wastewater Management Commission, applicant, has filed three applications in the office of the Water Resources Director in connection with a proposal to collect the wastewater discharge from the Agricpac cannery in Eugene, Oregon, transport the wastewater through a pipeline to a certain tract of land North of Eugene, where the wastewater is to be stored and/or applied to approximately 190 acres of crop land for irrigation of growing crops in lieu of other methods of disposal of the wastewater. The applications propose that any deficiency in the amount of water available from Agripac cannery wastewater, as needed for irrigation of said crops, would be made up by appropriation of ground water by means of a well located on the lands to be irrigated.

The site of the Agripac cannery from which the cannery process wastewater is discharged is shown by yellow shading on Figure 1, herein.

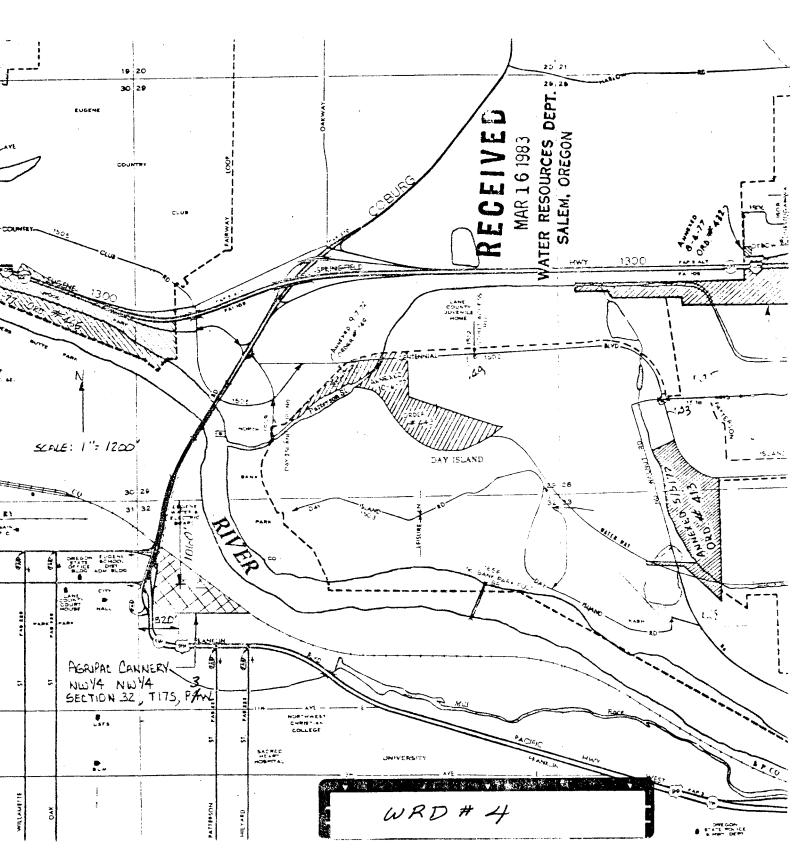
The land upon which the Agripac cannery process wastewater is to be stored and/or used for irrigation of growing crops is shown on Figure 2 by yellow shading. The storage lagoon site is identified by blue shading.

Application R-64817 was filed on January 31, 1983 and is for a permit to construct an off-channel reservoir with a total capacity of 230.2 acre-feet (storage lagoon) and store therein "Agripac cannery wastewater", using an active pool of 168.8 acre-feet for irrigation purposes, while maintaining a dead storage pool of 61.4 acre-feet with a minimum water surface elevation of 361.5 feet. (Exhibit WRD 1)

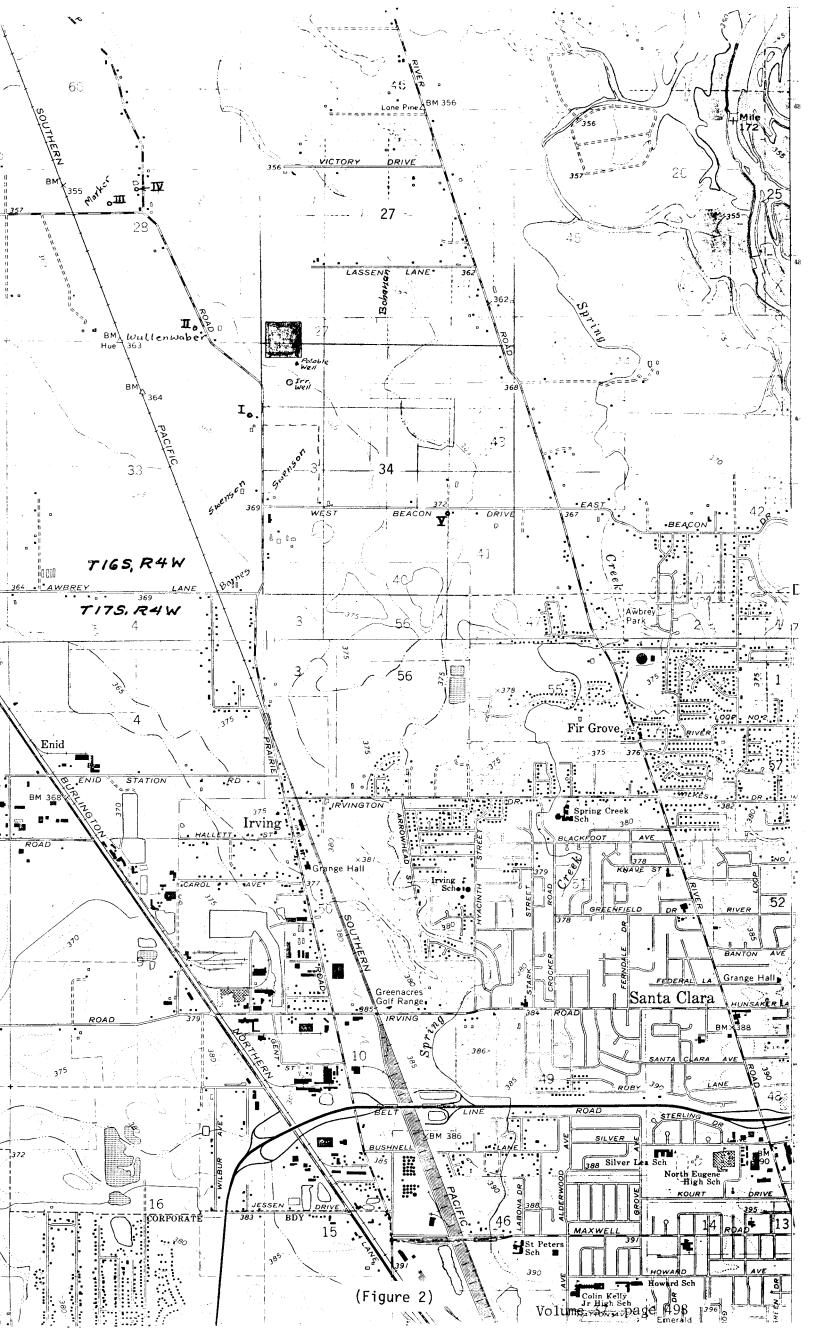
Application 64818 was filed on January 31, 1983 and is for a permit to use water from "Agripac cannery process wastewater and wastewater storage pond" for the purpose of "irrigation of crops for disposal of cannery wastewater" by sprinkler irrigation methods of application on a certain 189.1 acres of lands located within the S1/2 SW 1/4 of Section 27, NW 1/4 NE 1/4, S1/2 NE 1/4, NW 1/4, N 1/2 SW 1/4 and NW 1/4 SE 1/4 of Section 34, Township 16 South, Range 4 West, WM. (Exhibit WRD 2)

Application G-10841 was filed on November 22, 1982 and is for a permit to appropriate 1090 gallons per minute (GPM) of water from a certain ground water reservoir by means of two wells located within the NW 1/4 NW 1/4 of Section 34, Township 16 South, Range 4 West, WM, being 90 GPM from Well No. 1 for industrial use within the said NW 1/4 NW 1/4 of Section 34, and 1000 GPM from Well No. 2 "to be used intermittently for supplemental irrigation only" on the same 189.1 acres of land described in Application 64818. (Exhibit WRD 3)

On March 31, 1983, a protest was filed by Melva Barnes against approval of the said applications. In the protest it is alleged that the proposed storage and use of wastewater and the use of ground water as described by the pending Applications R-64817, 64818 and G-10841 would result in irreparable damage to the ground water reservoir which serves as the source of domestic water supply for the protestant and others. (Exhibit WRD 6)



(Figure 1)



Pursuant to the Director's Notice of Hearing dated April 15, 1983, the matter of pending Applications R-64817, 64818 and G-10841 in the name of Metropolitan Wastewater Management Commission and the protest by Melva Barnes against approval of the applications was brought to hearing at Eugene, Oregon, commencing on May 10, 1983, before James W. Carver, Jr., an employe of the Water Resources Department, authorized to preside in behalf of the Director.

The protestant, Melva Barnes, was present at the hearing and was represented by legal counsel, John I. Mehringer of the law firm of Schmerer and Mehringer of Eugene, Oregon. The applicant, Metropolitan Wastewater Management Commission, was represented by Jeffery D. Herman of the law firm of Thorp, Dennett, Purdy, Golden and Jewett of Springfield, Oregon.

### RULING ON MOTION

After several of Applicant's documentary exhibits were received into the hearing record by stipulation of counsel, but prior to calling applicant's first witness, Applicant moved to dismiss on the ground that Protestant had not produced testimony and/or evidence to prove the allegations made in the protest.

The hearings officer did not rule on the motion, but announced that the Water Resources Director would rule on the motion and include his ruling in his final order document.

Protestant alleges in her protest that the proposed storage and use of water as described by Applications R-64817, 65818 and G-10841 would result in irreparable damage to the ground water reservoir which serves as the source of domestic water supply for the protestant and others. Protestant did not produce testimony and evidence to prove the allegation made. However, the Water Resources Director's responsibilities pursuant to the provisions of ORS 537.180, 537.211, 537.620, 637.622 and 537.625 go beyond the question of irreparable damage.

Applicant's motion to dismiss is denied.

## FINDINGS OF FACT

The proposed Agripac wastewater irrigation site, located at the northeast corner of the intersection at West Beacon Drive and Prairie Road, within Sections 27 and 34 of Township 16 South, Range 4 West, WM, Lane County, Oregon, is about 2.5 miles from the Willamette River and is part of the abandoned flood plain on the floor of the river valley. River alluvium at the site is estimated to be at least 250 feet thick. It is composed of irregularly bedded sediments containing sand, gravel, clay and silt. Much of the gravel deposit is compacted and cemented with fine sand and clay. Ground water monitoring data indicate that the local water table stands within a few feet of land surface during the winter months. Water table elevations on site indicate a gradient toward the north-northwest from the elevation 358 feet (msl) at the south property boundary to elevation 348 feet (msl) at Lassen Road, north of the property. Reported water level data indicate the ground water from the deeper aquifer zone has a high piezometric head and tends to discharge from the aquifer toward surface stream drainages on and near the proposed site.

Testimony was received from Applicant's expert witnesses that water samples taken from several wells in the general area of the proposed project site showed concentrations of Nitrate-Nitrogen varying from 2.5 milligrams per liter (mg/l) to 9.3 mg/l. A sample of ground water from the existing 245-foot deep irrigation well on the proposed project site showed a Nitrate-Nitrogen concentration of 0.50 mg/l.

Testimony was received from Protestant and Protestant's witnesses as to the location and depth of their several domestic water supply wells. The Barnes property has two domestic wells, being 61 feet and 52 feet in depth. The Swenson property has one domestic well, being 65 feet in depth. The Marker property has two domestic wells, being 26 feet and 25 feet in depth. The Bohanan property has one domestic well, being 20 to 22 feet in depth. The Wullenwaber property has one domestic well, being 20 feet in depth. The relative locations of the said properties are identified by name on Figure 2. Protestant and Protestant's witnesses testified that water quality samples were taken from their respective wells at various times and that all such samples showed no bacterial contamination.

These data were confirmed by the results of Nitrate-Nitrogen and bacteriological tests of water samples collected from the five wells numbered I, II, III, IV and V on Figure 2, on July 27, 1983, by personnel from the Water Resources Department and the Department of Environmental Quality. The highest Nitrate-Nitrogen concentrations of 10 mg/l and 6.9 mg/l were found in Wells I and II, both wells being approximately 20 feet in depth. The other three wells, III with a depth of 28 feet, IV with a depth of 50 feet and V with a depth of 42 feet, had Nitrate-Nitrogen concentrations of 2.3 mg/l, 4.1 mg/l and 5.1 mg/l respectively. None of the water samples collected on July 27, 1983, showed bacteriological contamination.

Protestant produced no testimony or evidence in support of the allegation made in her protest against approval of the subject pending applications, that the storage and use of process wastewater from the Agripac cannery for irrigation of crops on the proposed project site would result in irreparable damage to the ground water reservoir which serves as the source of domestic water supply for the protestant and others similarly situated.

Protestant stated, through counsel, that she is not disputing the factual representations or the conclusions made by the Applicant's expert witnesses and expressed in their documentary reports received into the hearing records.

Having examined and considered the testimony and evidence adduced, the Water Resources Director finds that the proposed project for the disposal of food processing wastewater from the Agripac cannery by storage and use of the wastewater for irrigation of crops on the project site, as described by Applications R-64817 and 64818, and the attendant use of ground water as described by Application G-10841, would have no adverse effect on the continued uses of ground water in the nearby area, from either a chemical or a bacteriological consideration, if proper and adequate monitoring of the project is established and maintained to assure that the project is operated at all times within the constraints proposed by the Applicant.

The Water Resources Director further finds that to establish a proper and adequate monitoring program for operation of the cannery wastewater disposal project site, for the protection of the public waters, it is necessary that:

- Twelve single completion monitoring wells be constructed on site to replace the proposed six double completion wells as proposed by the consultants; and that the shallow wells and deep wells be constructed with separate drill holes and with casing seals adequate to prevent hydraulic connection between shallow and deep monitoring zones.
- 2) All ground water samples be collected by use of bailer or peristaltic pump; and that the sampling hoses or bailer lines be dedicated to each sampling well to prevent cross-contamination of water samples between wells.
- 3) One additional monitoring well be constructed near the center of the irrigated property at a point midway between Pivots 1, 2, and 3.
- 4) Each on site monitoring well be disinfected upon completion. Each well be pumped to remove residual chlorine and a total chlorine measuring device be used to insure that all chlorine has been removed from each well.

- 5) A representative sample of all well construction materials be collected and maintained for future laboratory analysis.
- 6) The PVC pipe used for monitoring well casing should be schedule 80 pipe and marked as NSF-PW or NSF-WC. The pipe connections be threaded only. Cements containing tetrahydrofuran or various ketones shall not be used.
- 7) Each monitoring well be secured against vandelism by surface casing, caps and seals.
- 8) Prior to each sampling, each monitoring well be purged at an appropriate rate by pumping from as near the water level as possible, with a minimum of five bore volumes being removed. The screen section of the well should not be dewatered. Samples are to be collected from within or just above the screened section of each well.

Background ground water quality monitoring and all subsequent water quality sampling shall be the responsibility of the Permittee. Water quality samples shall be collected from all of the on-site monitoring wells and also from each of the following listed domestic wells to which the applicant is allowed access.

Well Name	Location Number	Reported Depth
Barnes No. 2	16S/R4W - 33 ddd	61 feet
Swenson	16S/R4W - 33 daa	65 feet
Wamsley	16S/R4W - 33 ada	20 feet
Wullenwaber	16S/R4W - 28 ddc	20 feet
Marker	16S/R4W - 28 bdd	28 feet
Bohannan	16S/R4W - 27 dcb	22 feet
Lemert	16S/R4W - 34 bdb	42 feet

Said wells shall be sampled for the listed parameters a minimum of at least three times prior to cannery waste waters entering the site. Parameters to be analyzed are listed as follows:

pH	BOD-5	NO3-N	Carbaryl
Conductivity	TKN	Total Organic Halogen	Fonsofos
Total dissolved solids	NH3-N	Sodium	Methamidophos
Dimethoate	Captan	Roniet	Pyramin
Treflan	Lorshan	Lonox	Sutan
Treflan	Lorshan	Lonox	Sutan

A water level measurement shall be made and recorded prior to sampling or pumping each well. During at least one round of background sampling, all of the well water samples shall be tested for the following organic constituents:

Endrin	Toxaphen
Lindane	2,4, <b>-</b> D
Methoxychlor	2,4,5,-TP

Following the site storage and/or irrigation of cannery waste water, all of the on-site monitoring wells shall be sampled by Permittee and tested for the following constituents at the minimum frequency listed below.

Minimum Frequency Constituent quarterly рН quarterly Conductivity total dissolved solids quarterly quarterly BOD-5 quarterly TKN quarterly NH<sub>3</sub>-N quarterly NO<sub>3</sub>-N quarterly Water level measurements twice a year Sodium twice a year Total Organic Halogen twice a year Carbaryl twice a year Fanofos twice a year Methamidophos Dimethoate twice a year twice a year Captan

- a) Any line rupture or leakage from pipe lines or storage pond shall be reported to the Water Resources Department and the Department of Environmental Quality immediately.
- b) Rainfall and evaporation rates shall be monitored daily and influent and effluent volumes recorded to permit computation of the annual water balance at the site.
- c) A copy of all surface water and ground water quality monitoring data shall be provided to the Water Resources Department upon request.
- d) Future changes in water quality monitoring may be made through mutual agreements between the applicant, the Department of Environmental Quality, and the Water Resources Department.

The Water Resources Director further finds that to assure adequate protection for the public waters in the event of a malfunction in the operation of the proposed wastewater disposal project site, it is necessary that an emergency operational procedures manual for the project site operation, satisfactory to the Water Resources Director, be submitted prior to issuance of permits in approval of the pending Applications R-64817, 64818 and G-10841.

Protestant does not allege that the storage and use of wastewater from the Agripac cannery as proposed by Applications R-64817 and 64818, or the attendant use of ground water as proposed by Application G-10841, would result in diminuation of the quantity of surface and/or ground waters necessary to satisfy the needs of Protestant or others similarly situated, within the limits of existing entitlements to water.

The annual discharge of wastewater from the Eugene, Oregon, Agripac cannery will be approximately 378 acre-feet. The distribution of the discharge, by month, is projected as:

January	_	0.0	May	-	<b>6.</b> 3	September	-	96.l
February			June	_	1.6	October	-	80.6
March			July	_	61.0	November	-	29.6
April	_	1.8	August	-	70.6	December	-	30.6

Storage and use of the wastewater from the Eugene, Oregon, Agripac cannery as proposed by Applications R-64817 and 64818, in lieu of continuing to dispose of the wastewater by treatment in the City of Eugene sanitary sewage treatment plant and discharge into the Willamette River, would not have a measureable adverse effect on appropriators of water from the Willamette River downstream from the treatment plant.

### ULTIMATE FINDINGS OF FACT

The storage and use of wastewater from the Eugene, Oregon, Agripac cannery as proposed by Applications R-64817 and 64818, and the attendant use of ground water as proposed by Application G-10841, would not result in conflict with existing water rights for use of surface waters by others.

The storage and use of wastewater from the Eugene, Oregon, Agripac cannery as proposed by Applications R-64817 and 64818, and the attendant use of ground water as proposed by Application G-10841, would not result in conflict with existing water rights for use of ground waters by others.

The storage and use of wastewater from the Eugene, Oregon, Agripac cannery as proposed by Applications R-64817 and 64818, and the attendant use of ground water as proposed by Application G-10841, would not have an adverse effect on the continued uses of ground water by others from the ground water reservoir which, in part, underlies the above described project site, from either a chemical or a bateriological consideration, with proper and adequate monitoring of the project to assure that the project is operated at all times within the constraints proposed by the applicant.

### CONCLUSIONS OF LAW

At such time as the Applicant has submitted to the satisfaction of the Water Resources Director an emergency operational procedures manual for the project site operation, the subject pending Applications R-64817, 64848 and G-10841 should be approved pursuant to the provisions of ORS 537.211 and 537.625.

#### ORDER

NOW, THEREFORE, it is ORDERED that when the Applicant has submitted to the satisfaction of the Water Resources Director an emergency operational procedures manual for the project site operation, Applications R-64817, 64818 and G-10841, described herein above, be approved by issuance of permits.

It is FURTHER ORDERED that the storage and use of wastewater from the Eugene, Oregon, Agripac cannery pursuant to permits issued in approval of Applications R-64817 and 64818 shall be subject to proper and adequate monitoring of the operation of the wastewater disposal project site, and operation of the project site in accordance with the provisions of the emergency operational procedures manual submitted to the satisfaction of the Water Resources Director. Proper and adequate monitoring shall be in accordance with the prerequisites set forth herein above.

Date at Salem, Oregon, this 13th day of October, 1983.

CHRIS L. WHEELER Deputy Director

NOTICE: You are entitled to judicial review of this order. Judicial review may be obtained by filing a petition for review within 60 days from the service of this order. Judicial review is pursuant to the provisions of ORS 183.482.