



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

Dan Bowker  
Maine Wild Blueberry Company  
Park Street, P. O. Box 128  
Cherryfield, Maine 04622

July 24, 2006

RE: Permit Compliance System Tracking Number # MEU508236  
Maine Waste Discharge License (WDL) Application # W008236-5P-A-N  
**Final License**

Dear Mr. Bowker:

Enclosed please find a copy of your **final** Maine WDL which was approved by the Department of Environmental Protection. Please read the license and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding this matter, please feel free to call me at 287-7658.

Sincerely,

David Silver  
Division of Water Quality Management  
Bureau of Land and Water Quality

Enc. Jim Sohns, DEP/CMRO  
Sandy Lao, USEPA  
John Vear, Planet Wastewater Services, 457 Front St, Richmond 04357  
Pat Frappier, 197 Evergreen Point Road; Jonesboro, Maine 04648  
Nancy Oden, P.O. Box 186, Jonesboro, Maine 04648

WDS:W008236



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE HOUSE STATION 17      AUGUSTA, MAINE 04333

DEPARTMENT ORDER

**IN THE MATTER OF**

MAINE WILD BLUEBERRY COMPANY	)	PROTECTION AND IMPROVEMENT
JONESBORO, WASHINGTON CO., MAINE	)	OF WATERS
SURFACE WASTE WATER DISPOSAL SYSTEM	)	
PCS TRACKING #MEU508236	)	WASTE DISCHARGE LICENSE
WDL #W008236-5P-A-N <b>APPROVAL</b>	)	<b>NEW</b>

Pursuant to the provisions of 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department) has considered the application of MAINE WILD BLUEBERRY COMPANY (MWB) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

**APPLICATION SUMMARY**

The applicant has applied for a new Waste Discharge License (WDL) which has been assigned WDL number #W008236-5P-A-N. The application is for the operation of a new surface waste water disposal system for the discharge of blueberry processing waste water. Treatment is achieved by screening, solid separation in settling tanks, and facultative treatment in two (2) lagoons with seasonal disposal via a 21.5-acre spray irrigation site located on land in Jonesboro. The licensee has applied to discharge waste water to the spray irrigation field at a rate of two inches per week (54,300 gallons per acre per week) for a total maximum of 1,167,450 gallons per week over the entire 21.5 acre spray irrigation area). By utilizing the entire 21.5 acre spray irrigation area over the entire 31 week spray irrigation season, the total amount of waste water that could be applied to the site under ideal conditions is 36,190,950 (1,167,450 gallons per week X 31 weeks) gallons. With an annual waste water generation of 4,652,000 gallons, the spray irrigation system is sufficiently sized and provides ample flexibility to treat and dispose of the amount of waste water generated.

**RENEWAL SUMMARY**

The facility has been assigned number MEU508236 for license compliance tracking purposes in the Department's Permit Compliance System (PCS).

The most significant conditions imposed by this licensing action include:

1. Establishing limitations and monitoring requirements for the spray-irrigation fields and ground water monitoring wells along with certain operational constraints in order to provide consistency across similar facilities licensed by the Department;
2. Requiring the submission of a Spray Irrigation Performance Report as an exhibit to the application for the next license renewal;
3. Requiring the licensee to maintain an up-to-date Operations & Maintenance (O&M) Plan;
4. Limiting the spray irrigation season to a time frame of April 15 – November 15<sup>th</sup> of each year.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated May 1, 2006, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:
  - (a) Existing water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

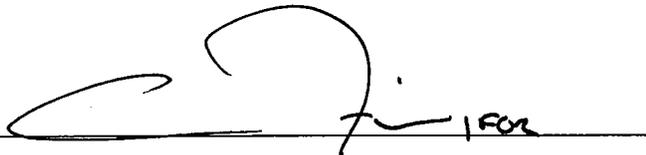
**ACTION**

THEREFORE, the Department APPROVES the above noted application of the MAINE WILD BLUEBERRY CO., to operate a surface waste water disposal system to discharge up to 1,167,450 gallons per week of treated waste water to soil above groundwater, Class GW-A, via a 21.5 acre spray irrigation area, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

1. "Standard Conditions of Industrial Discharge Licenses," revised August 14, 1996, copy attached.
2. The attached Special Conditions, including effluent limitations and monitoring requirements.
3. This license expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 26<sup>th</sup> DAY OF JULY, 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

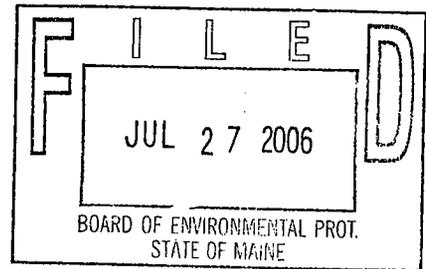
BY: 

David P. Littell, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 11, 2006

Date of application acceptance: April 14, 2006



Date filed with Board of Environmental Protection \_\_\_\_\_

This Order prepared by David Silver, BUREAU OF LAND & WATER QUALITY

BlueberryTemplate; W0082365PAN 21JUL06

**SPECIAL CONDITIONS**

**A. LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning the effective date of the license and lasting through the license expiration date, the licensee is authorized to operate a surface waste water treatment and disposal system. The **STORAGE LAGOON EFFLUENT (OUTFALL 001)** <sup>(1)</sup> shall be limited and monitored as specified below.

	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Biochemical Oxygen Demand <i>[00310]</i>	Report, mg/L <i>[19]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Total Suspended Solids <i>[00530]</i>	Report, mg/L <i>[19]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Nitrate-Nitrogen <i>[00620]</i>	Report, mg/L <i>[19]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Total Kjeldahl-Nitrogen <i>[00625]</i>	Report, mg/L <i>[19]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Chemical Oxygen Demand <i>[81017]</i>	Report, mg/L <i>[19]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Specific Conductance <i>[00095]</i>	Report, umhos/cm <i>[11]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
PH (Standard Units) <i>[00400]</i>	Report S.U. <i>[12]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>
Pesticides <sup>(3)</sup> :	Report ug/L <i>[28]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>

The bracketed italicized numeric values in the table above and tables that follow are code numbers that the Department personnel utilize to code the monthly Discharge Monitoring Reports.

Footnotes: - See page 7 and 8 of this license.

**SPECIAL CONDITIONS**

**A. LIMITATIONS AND MONITORING REQUIREMENTS**

2. During the period beginning the effective date of the license and lasting through the license expiration date, application of waste water to the land via a spray irrigation system shall be limited to the time period **April 15<sup>th</sup> to November 15<sup>th</sup> of each calendar year**. The **SPRAY-IRRIGATION FIELD, SF-W** (Spray Field-West contains 13.8 acres), and **SF-E** (Spray Field-East contains 7.7 acres) shall be limited and monitored as specified below.

<b>Parameter</b>	<b>Monthly <u>Total</u> as specified</b>	<b>Weekly <u>Average</u> as specified</b>	<b>Measurement <u>Frequency</u> as specified</b>	<b>Sample <u>Type</u> as specified</b>
Application Rate (Weekly) <sup>(4)</sup> [51125]	---	54,300 gal/acre/week <sup>(5)</sup> (2.0 in/acre/week) [8B]	1/Week [01/07]	Calculate [CA]
Flow – Total Gallons <sup>(4)</sup> [82220]	Report (Gallons) [80]	---	1/Month [01/30]	Calculate [CA]
Chemical Oxygen Demand [81017]	---	Report, #/acre/week <sup>(5)</sup> [8B]	1/Week [01/07]	Grab [GR]
Total Nitrogen as N [00600]	---	Report, #/acre/week <sup>(5)</sup> [8B]	1/Week [01/07]	Grab [GR]

**Footnotes:** - See page 7 and 8 of this license.

**SPECIAL CONDITIONS**

**A. LIMITATIONS AND MONITORING REQUIREMENTS**

3. During the period beginning the effective date of the license and lasting through the license expiration date, **GROUND WATER MONITORING WELLS**; **MW008A** (the easterly most monitoring well and downgradient of lagoon #2), **MW008B** (is located northwesterly of MW008A and east-northeasterly and downgradient of lagoon #2), **MW008C** (located westerly and upgradient of lagoon #1 and considered a lagoon background well), **MW-SFW** (located in the westerly spray irrigation area), and **MW-SFE** (located in the easterly spray irrigation field), shall be limited and monitored as specified below.

Monitoring Requirements

	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Nitrate-Nitrogen <i>[00620]</i>	10 mg/L <i>[19]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
Total Kjeldahl Nitrogen <i>[00625]</i>	Report, mg/L <i>[19]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
Depth to Water Level Below Landsurface <i>[72019]</i>	Report (feet) <sup>(6)</sup> <i>[27]</i>	3/Year <sup>(7)</sup> <i>[03/YR]</i>	Measure <i>[MS]</i>
Specific Conductance <i>[00095]</i>	Report (umhos/cm) <i>[11]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
Temperature <i>[00011]</i>	Report (Farhenheit) <i>[15]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
PH (Standard Units) <i>[00400]</i>	Report (S.U.) <i>[12]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
Total Suspended Solids <i>[00530]</i>	Report (mg/L) <i>[19]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
Chemical Oxygen Demand <i>[81017]</i>	Report (mg/L) <i>[19]</i>	2/Year <sup>(8)</sup> <i>[02/YR]</i>	Grab <i>[GR]</i>
<u>Pesticides</u> <sup>(3, 8)</sup>	Report ug/L <i>[28]</i>	1/Month <sup>(2)</sup> <i>[01/30]</i>	Grab <i>[GR]</i>

Footnotes: Please refer to pages 7 and 8

**SPECIAL CONDITIONS**

**A. LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)**

Footnotes – [Special Condition A(1), A(2), and A(3)]

Storage Lagoon Effluent

Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Low flow technique may be used as well as the bailer methodology.

(1) Storage lagoon effluent shall be sampled (at a point in the lagoon furthest from the influent pipe or at a sampling port on the discharge pipe leading to the spray irrigation area) and shall be representative of what is actually sprayed on the fields. Any change in sampling location must be approved by the Department in writing.

(2) Storage lagoon effluent sampling shall be conducted in the months of **April, May, August, and October** of each calendar year in accordance with approved methods for sampling, handling and preservation. The licensee is not required to test for these parameters during a month where no waste water was disposed of via the spray irrigation system.

(3) Sampling for pesticides in the storage lagoon effluent, groundwater monitoring wells shall be conducted according to the frequency and methods indicated. Ground water samples shall continue for the next sampling event as long as the parameter is detected in the previous groundwater samples and shall occur if the parameter is detected above MEG in the storage lagoon effluent sampling. If the parameter is not detected above the MEG in storage lagoon effluent, it does not need to be sampled for in the ground water monitoring locations.

At least 30 days prior to commencing the spray irrigation system each year, the licensee shall report to the Department's compliance inspector and the Maine Board of Pesticide Control any insecticides, fungicides, and herbicides (collectively referred to as pesticides) that have been or may be used during the calendar year on blueberries processed through the facility that are not identified in this license. Such notification shall include analytical methods available to test for each pesticide. Based on this information, and any other information that may become available, the Department may suspend testing for the above referenced pesticide(s) if they are not in use or detected in sampling, and/or may require testing for other pesticides if warranted.

Spray-Irrigation Fields

(4) A field's weekly application rate is the total gallons sprayed over the applicable period of time divided by the size of the wetted area of the spray-irrigation field or the area in acres of that portion of the field utilized. Note: 54,300 gallons is equivalent to two-inches per acre. The licensee shall measure the flow of waste water to the irrigation area by the use of a flow measuring device that is checked for calibration at least once per calendar year. Weekly is defined as Sunday through Saturday.

**SPECIAL CONDITIONS**

**A. LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)**

(5) For Discharge Monitoring Report (DMR) reporting purposes, the licensee shall report the highest weekly application rate for the month in the applicable box on the form. Compliance with weekly reporting requirements must be reported for the month in which the calendar week ends.

Ground Water Monitoring

(6) Measured to the nearest one-hundredth (1/100<sup>th</sup>) of a foot as referenced from the surface of the ground at the base of the monitoring well.

(7) Depth to Water Level Below the Land Surface shall be conducted in the months of **May, August and October** of each calendar year.

(8) Ground water sampling shall be conducted the months of **May and October** of each year. Sampling, handling and preservation shall be conducted in accordance with federally approved methods. Specific conductance (calibrated to 25.0° C), temperature, and pH are considered to be "field" parameters, and are to be measured in the field via instrumentation. The licensee is required to test for these parameters whether wastewater was disposed of via the spray-irrigation system or not. Specific Conductance values greater than 275 umhos/cm, consistent trends approaching 275 umhos/cm or sudden spikes from previous levels shall be reported to the Department within forty-eight (48) hours and may necessitate the need for additional ground-water testing requirements. Ground water samples shall continue for the next sampling event as long as the parameter is detected in the previous groundwater samples and shall occur if the parameter is detected above MEG in the storage lagoon effluent sampling.

**B. TREATMENT PLANT OPERATOR**

The operation of the treatment facility must be overseen by a person holding a minimum of a **Grade II Waste Water Treatment Plant Operator Certificate** [or a Maine Professional Engineer (P.E.)] pursuant to Title 32 MRSA, Section 4171 et seq. All proposed contracts for facility operation by a commercial contract operator must be approved by the Department before such contract operation begins.

**C. MONITORING AND REPORTING**

Monitoring results shall be summarized for each calendar quarter and reported on separate Discharge Monitoring Report Forms provide by the Department and **postmarked on or before the thirteenth (13<sup>th</sup>) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15<sup>th</sup>) day of the month** following the completed reporting period. A signed copy of the Discharge Monitoring Report and all other reports required herein, unless otherwise specified, shall be submitted to the Department assigned compliance inspector at the following address:

Maine Department of Environmental Protection  
Division of Water Quality Management  
Eastern Maine Regional Office  
Bureau of Land & Water Quality  
106 Hogan Road  
Bangor, ME. 04401

#### **D. AUTHORIZED DISCHARGES**

The licensee is authorized to discharge treated waste water only in accordance with the terms and conditions of this license and only to the existing spray-irrigation field [Outfall SF-W and SF-E] and from those sources as indicated in the Waste Discharge License application. Discharge of waste water from any other location or from sources other than those indicated on said application requires formal modification of this license.

#### **E. NOTIFICATION REQUIREMENT**

In accordance with Standard Condition #6, the permittee shall notify the Department of any substantial change in the volume or character of pollutants being introduced into the treatment system. For the purposes of this section, notice regarding substantial change shall include information on:

- (a) the quality and quantity of waste water introduced to the treatment system; and
- (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be introduced into the treatment system.

#### **F. GENERAL OPERATIONAL CONSTRAINTS**

1. All waste water shall receive treatment through a properly designed, operated and maintained screen and settling tank and lagoon system prior to land irrigation.
2. The spray-irrigation facilities shall be effectively maintained and operated at all times so that there is no discharge to surface waters, nor any contamination of ground water which will render it unsatisfactory for usage as a public drinking water supply. There shall be no runoff outside the designated spray field boundaries as a result of operation of the spray system.
3. The surface waste water disposal system shall not cause the lowering of the quality of the ground water, as measured in the ground water monitoring wells specified by this license, below the State Primary and Secondary Drinking Water Standards specified in the Maine State Drinking Water Regulations pursuant to Maine law 22 M.R.S.A. § 2611. In the event that ground water monitoring results indicate lowering of the existing groundwater quality, the licensee may be required to take immediate remedial action(s), which may include but not limited to, adjustment of the irrigation schedule or application rates, a reduction of the pollutant loading, ground water remediation, or ceasing operation of the system until the groundwater attains applicable standards.
4. The Department shall be notified as soon as the licensee becomes aware of any threat to public health, unlicensed discharge of waste water, or any malfunction that threatens the proper operation of the system. Notification shall be made in accordance with the attached Standard Condition #5 of this license.
5. The licensee shall maintain a file on the location of all system components and relevant features. Each component shall be mapped and field located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department.
6. System components including collection pipes, tanks, manholes, pumps, pumping stations, spray disposal fields, and monitoring wells shall be identified and referenced by a unique identifier (alphabetical, numeric or alpha-numeric) in all logs and reports.

### G. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS

1. Suitable vegetative cover shall be maintained. Waste water may not be applied to areas without sufficient vegetation or ground cover as to prevent erosion or surface water runoff outside the designated boundaries of the spray fields.
2. At least 10 inches of separation from the ground surface to the ground water table shall be present prior to spray irrigation.
3. No waste water shall be applied to the site following a rainfall accumulation exceeding 1.0 inches within the previous 24-hour period. **A rain gauge shall be located nearby or on site to representatively monitor daily precipitation.** The licensee shall also manage application rates by taking into consideration the forecast for rain events in the 48-hour period in the future.
4. No waste water shall be applied where there is snow present on the surface of the ground. No waste water shall be applied when there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.
5. No traffic or equipment shall be allowed in the spray-irrigation field except where installation occurs or where normal operations and maintenance are performed.

### H. SPRAY IRRIGATION OPERATIONAL PROCEDURES, LOGS AND REPORTS

1. **Prior to the commencement of spray irrigation for the season**, the licensee shall notify the Department's compliance inspector that they have verified that site conditions are appropriate (frozen ground, soil moisture, etc) for spray irrigation.
2. The permittee shall install the equivalent of one ground water level inspection well in each spray field to verify that 10 inches of separation from the ground surface to the observed groundwater level is present prior to spraying. Depths to ground water shall be recorded in accordance with the format of "*Depth to Groundwater*" provided as Attachment "C".
3. The licensee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities. **Within one hour after system start-up**, the licensee shall inspect the system for leaks in the piping, determine if individual spray heads and pumps are functioning as designed and verify that application rates are appropriate for the site conditions. Should significant malfunctions or leaks be detected, the licensee must shut down the malfunctioning portion of the spray system and make necessary repairs before resuming operation. The licensee shall cease irrigation if runoff is observed outside the designated boundaries of the spray field.
4. **The licensee shall maintain a daily log** of all spray irrigation operations which records, the date, weather and soil conditions, rainfall, areas irrigated, volume sprayed (gallons), application rates (daily and weekly), and other relevant observations/comments from daily inspections. The log shall be in accordance with the format of the "*Monthly Operations Log*" provided as Attachment "A" of this license. Weekly spray application rates shall be reported in accordance with the format of the "*Spray Application Report by Week*" provided as Attachment "B" of this license. The *Monthly Operations Log*, *Spray Application Report by Week*, and *Depth to Groundwater* for each month shall be submitted to the Department as an attachment to the monthly Discharge Monitoring Reports (DMR's). Copies will also be maintained on site for Department review and for license operation maintenance purposes.

#### **I. VEGETATION MANAGEMENT**

1. The licensee shall remove grasses and other vegetation such as shrubs and trees if necessary so as to not impair the operation of the spray-irrigation system, ensure uniform distribution of waste water over the desired application area and to optimize nutrient uptake and removal.
2. The vegetative buffer zones along the perimeter of the site shall be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray.

#### **J. LAGOON MAINTENANCE**

1. The integrity of the lagoons shall be inspected periodically during the operating season and properly maintained at all times. There shall be no overflow through or over the lagoon berms. Any signs of leaks or overflow shall be repaired or corrected immediately.
2. The licensee shall maintain freeboard of the lagoons at design levels or at least two (2) feet whichever is greater. The lagoons shall be operated in such a way as to balance the disposal of waste water via spray irrigation and to ensure that design freeboard levels are maintained.
3. The lagoons shall be cleaned of solid materials as necessary to maintain the proper operating depths that will provide best practicable treatment of the wastewater. All material removed from the lagoons shall be properly disposed of in accordance with all applicable State and Federal rules and regulations.

#### **K. INSPECTIONS AND MAINTENANCE**

The licensee shall inspect all system components to ensure the facility is being operated and maintained in accordance with the design of the system. Maintenance logs shall be maintained for each major system component including pumps, pump stations, lagoons, spray apparatus, and pipes. At a minimum, the logs shall include the unique identifier [alphabetic, numeric or alpha-numeric -see Special Condition F(6)], the date of maintenance, type of maintenance performed, names or person performing the maintenance, and other relevant system observations.

#### **L. GROUND WATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS**

1. **By October 1, 2006 (PCS Event 24599)**, the licensee shall submit to the Department for review and approval a ground water quality monitoring plan. The licensee shall refer to guidance for said plan as outlined in Attachment "1" entitled "*Water Quality Monitoring Plan Details*" of the Fact Sheet of this license. It is noted that sample collection may be facilitated by a number of authorized procedures.
2. All monitoring wells shall be equipped and maintained with a cap and lock to limit access and shall be maintained in a secured state at all times. The integrity of the monitoring wells shall also be verified annually and reported on the comment section of the monitoring wells Discharge Monitoring Report.
3. The Department reserves the right to require increasing the depth and or relocating any of the groundwater monitoring wells if the well is perennially dry or is determined not to be representative of groundwater conditions.

#### **M. SPRAY IRRIGATION PERFORMANCE REPORT**

**As an exhibit to the next application for license renewal [pcs code 88899],** the licensee shall submit to the Department a report of the treatment system's performance covering the previous five calendar years. The report shall be dated and signed by the operator in responsible charge of the system.

The report shall include, but is not necessarily limited to, an updated source description, an updated schematic and narrative of the treatment system and distribution system, a summary of the past performance demonstrating compliance with all terms and conditions of the effective license, a description of any proposed changes in the overall system or operation of the system, and if applicable, proposed changes in the effective license.

#### **N. OPERATIONS AND MAINTENANCE (O & M) PLAN AND SITE PLAN(S)**

This facility shall have a current written comprehensive Operation & Maintenance (O & M) Plan. The plan shall provide a systematic approach by which the licensee shall at all times, properly operate and maintain all facilities and the systems of treatment and control (and related appurtenances) which are installed or used by the licensee to achieve compliance with the conditions of this license. The O & M plan shall be a working document designed for use by personnel working at the facility.

**By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades,** the licensee shall evaluate and modify the O& M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O& M Plan shall be kept on-site or at the company's Environmental Coordinators office at all times and made available to the Department personnel upon request.

**Within 90 days of completion of new and substantial upgrades of the wastewater treatment facility,** the licensee shall submit the updated O&M Plan to their Department inspector for review and comment.

#### **O. PUBLIC ACCESS TO LAND APPLICATION SITES AND SIGNAGE**

Access to the land application sites shall be limited during the season of active site use. The licensee shall install signs measuring at least 8 ½" x 11", in areas of concern around the perimeter of the lagoon and spray irrigation site that inform the general public that the area is being used to dispose of blueberry processing waste waters. The signs must be constructed of materials that are weather resistant. The licensee must annually inspect and make any necessary repairs to the signage to comply with this condition.

**P. REOPENING OF LICENSE MODIFICATIONS**

Upon evaluation of any required test results, results of inspections and/or reporting required by the Special Conditions of this licensing action, additional site specific or any other pertinent information or test results obtained during the term of this license, the Department may, at anytime and with notice to the licensee, modify this license to require additional monitoring, inspections and/or reporting based on the new information.

**Q. SEVERABILITY**

In the event that any provision, or part thereof, of this license is declared to be unlawful by a reviewing court, the remainder of the license shall remain in full force and effect, and shall be construed and enforced in all respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.



# Spray Application Report by Week

**Attachment B**

**Facility Name: Maine Wild Blueberry;**

WDL #W008236-5P-A-N;(Month \_\_\_\_\_, Year \_\_\_\_\_) Weekly Application Rate 54,300 gallons/acre 2.0 inches)

Field Name/#	Effective Spray Area (Acres)	Weekly Limit (Gallons/Acre)	Actual Spray Application Rates (Gallons per Acre)					Number of Exceptions to Weekly Limit	Monthly Average
			Week 1	Week 2	Week 3	Week 4	Week 5		
Note: 1 acre-inch is equivalent to 27,150 gallons of liquid 27,150 gallons per acre is equivalent to 1.0 inch						Total Number of Exceptions			

A spray-field's weekly application rate is the total gallons sprayed (Sunday through Saturday) divided by the size of the spray-field in acres or the size in acres of that portion of the spray field utilized.

Signature of Responsible Official: \_\_\_\_\_, Date \_\_\_\_\_

**Depth to Groundwater (Tenths of Feet)**

**Attachment C**

(Month \_\_\_\_\_, Year \_\_\_\_\_)

Facility Name: Maine Wild Blueberry Co. ; WDL #W008236-5P-A-N;

Field Name/#	Monitoring Location	1. Depth to Groundwater (Measured From Ground Surface in Tenths of Feet)					Number of Exceptions	Monthly Average Depth
		Week 1	Week 2	Week 3	Week 4	Week 5		
						Total Number of Exceptions		

Note: Special Condition G of the License requires that a depth of 10 inches from the ground surface to the groundwater table must be present prior to spraying.

Signature of Responsible Official: \_\_\_\_\_, Date \_\_\_\_\_

**MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

Date: May 1, 2006

COMPLIANCE TRACKING NUMBER: MEU508236

LICENSE NUMBER: #W008236-5P-A-N

NAME AND MAILING ADDRESS OF APPLICANT:

**Maine Wild Blueberry Company.  
Attn: Dan Bowker, Environmental Coordinator  
Park Street, POBox 128  
Cherryfield, Maine 04622**

COUNTY: **Washington County**

NAME AND ADDRESS OF FACILITY:

**Maine Wild Blueberry Company  
Park Street, POBox 128  
Cherryfield, Maine 04622**

NAME AND ADDRESS OF LICENSED CONTRACT OPERATOR:

**Planet Wastewater Services, Inc.  
Attn: John C. Vear, President  
Maine Operator Certificate Grade 4 (#835)  
457 Front Street  
Richmond, Maine 04357**

RECEIVING WATER/CLASSIFICATION: **Groundwater/Class GW-A**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

**Dan Bowker, Environmental Coordinator  
(207) 255-8364 or 598-8021**

**1. APPLICATION SUMMARY:**

- a. Application : The applicant has applied for a new Waste Discharge License (WDL) which has been assigned WDL number #W008236-5P-A-N. The application is for the operation of a new surface waste water disposal system for the discharge of blueberry processing waste water. Treatment is achieved by screening, solid separation in settling tanks, and facultative treatment in two (2) lagoons with seasonal disposal via a 21.5-acre spray irrigation site located on land in Jonesboro. The licensee has applied to discharge waste water to the spray irrigation field at a rate of two inches per week (54,300 gallons per acre per week) for a total maximum of 1,167,450 gallons per week over the entire 21.5 acre spray irrigation area). By utilizing the entire 21.5 acre spray irrigation area over the entire 31 week spray irrigation season, the total amount of waste water that could be applied to the site under ideal conditions is 36,190,950 (1,167,450 gallons per week X 31 weeks) gallons. With an annual waste water generation of 4,652,000 gallons, the spray irrigation system is sufficiently sized and provides ample flexibility to treat and dispose of the amount of waste water generated.

b. History: Recent Department licensing actions include the following:

- April 11, 2006 - Maine Wild Blueberry Co. submitted an application to the Maine Department of Environmental Protection for a new spray irrigation Waste Discharge License.
- April 14, 2006 - Maine Wild Blueberry Company's application for a new spray irrigation Waste Discharge License was accepted for processing by the Maine Department of Environmental Protection.

c. Source Description:

The Maine Wild Blueberry facility generates blueberry processing wastewater and clean-up water primarily associated with the handling and packaging of cranberries and blueberries. The facility processes fresh fruit and handles processed and frozen berries year-round between early January and late December. The processing plant has the capacity to process up to 400,000 pounds of berries per day during the fresh fruit harvest, with generation of a maximum of 100,000 gallons of wastewater per day. During normal repackaging operations, a maximum of 10,000 pounds of berries may be processed, with up to 20,000 gallons of wastewater being generated. The fresh fruit harvest typically begins in late July and can extend into early September. Repacking operations begin in mid-September and continue through the following June. The wastewater from the processing operations contains natural dissolved and suspended organic matter and other materials and solids.

Maine Wild Blueberry Co's. associated company (Cherryfield Foods, Inc.) may also land-apply blueberry wastewater here, which was generated during regular production activities. Typically, Cherryfield Foods, Inc. processes all wastewater within its own land spray production site located in Milbridge. This site would serve as a back-up in the event of problems at the Milbridge site. Cherryfield Foods Inc. may transport wastewater via tractor-trailer tankers to the Maine Wild Blueberry lagoon site for blending, processing and land application. The waste water is pumped to the lagoon(s) from the transporting tanker via a PTO driven pump or is discharged from the tanker by gravity.

d. Waste Water Treatment:

Wastewater generated through fresh fruit processing and canning operations at the Maine Wild Blueberry Co. facility flows into and is collected by grated floor drains throughout the production area of the facility. Flow is transmitted via an 8" pipe from the facility, across a parking lot, and into the on-site (dormant) treatment plant building. There is also a fifty (50) foot square sloped concrete pad located outside of the loading dock area which has been designed to catch any blueberries lost during fresh fruit unloading operations. This pad is drained via a four (4) inch drain line located at the base of the pad's slope, which also directs its flow to the treatment plant building influent channel.

Flow enters the treatment plant building's basement via a twelve (12) inch wide by twelve (12) inch deep influent channel, and flows through a Tracom, Inc. parshall flume. The parshall flume is no longer utilized for flow measurement, but has been cast in place and remains within the waste flow path. A Khrono Model RSA 2548-1 magnetic flow meter now records all influent flows. Wastewater then passes through a Hycor Model RSA

2548-1 hydrostrainer which houses a 4'-0" long by 2'-0" diameter sieve screen with an orifice size of .020. Berries, twigs and other foreign matter separated by the screen is disposed of via two screw conveyors, which transport the wastes to 55-gallon barrels located on the ground floor of the treatment plant building. All twig/berry waste is collected and stored for composting.

The primary screw conveyor, on the horizontal plane, is 6'-0" long and contains a 8" diameter screw. The primary screw conveyor discharges into a secondary screw conveyor, which is angled upward at 45°. This conveyor is 15'-0" long and houses a 10" diameter screw. Both screw conveyors are fabricated out of stainless steel.

Once stripped of solids, blueberry wastewater flows by gravity into two concrete grit settling tanks measuring 3'-0" wide, 7'-0" long, and 8'-0" deep with a capacity of 1,250 gallons each. Each of the two grit tanks house- alternating Wemco grit pumps, which pump the wastewater to the Wemco hydrogritter located on the ground floor of the headworks building. Grit is classified within the cyclone, dewatered and transported by the grit screw and discharged into 55-gallon barrels for eventual composting.

Overflow from the grit tanks, along with degritted water, is then introduced into two 58'-0" x 58'-0" X 16'-0" deep concrete holding basins with a capacity of 400,000 gallons each. Wastewater is stored here for a brief period of time until it can be transported to the Jonesboro lagoon/land spray application site. Blueberry wastewater is pumped from the holding basins to the transportation trucks via a ten (10) horsepower Honda centrifugal water pump. The pump has the capacity to move approximately 300 gallons per minute (gpm). Transportation is handled by a semi-truck and trailer with a capacity of 6,000 gallons. The volume of blueberry wastewater transported is dependent upon the volume of wastewater generated, and will vary based on orders for products and/or the fresh fruit production period. Additional tanker trucks may be utilized during the fresh fruit processing season, if necessary.

Once per month or as deemed necessary, settled waste solids held within the Machias concrete holding basins will be dewatered at the production facility. Maine Wild Blueberry Co. owns and operates a 1.5 meter belt filter press. The press is mounted on a trailer and is outfitted with a drainage system, wash water pumping system, and a duplex batch polymer mixing system capable of sustaining continuous dewatering operations. Dewatered sludge is conveyed to a dump truck via a ten (10) inch diameter stainless steel screw conveyor. All dewatered sludge, grit, waste berries and twigs are transported to the Coast of Maine Compost Co. located in Marion, Maine for composting. The solid waste composting activity at the Coast of Maine Compost Co. is authorized under DEP License Number S02893-CG-CN.

The total annual flow to be delivered to the lagoons from the production facility, which is based on perceived production levels, will be 6,900,000 gallons. This volume is based on 12,000 GPD for regular canning production (5 days per week for 45 weeks) and 100,000 GPD for fresh fruit processing (7-days per week for six weeks).

There are two (2) clay-lined wastewater lagoons to be constructed at the site, which will be located in Jonesboro. The lagoons are scheduled to be constructed in 2006. Lagoon number "1" will have a capacity of 0.98 MG with a water depth of 5'0". Lagoon number "2" will have a capacity of 2.1 MG with a water depth of 5'0".

Wastewater is drawn from the lagoon(s) for land spray irrigation utilizing a 100-hp self-contained pump. This pump has the capacity to pump at a rate of between 500 to 1,500 gpm. The irrigation delivery system will be constructed of High Density Polyethylene (HDPE) pipe.

The land spray irrigation site is comprised of 22.0 acres of land and is divided into two (2) sections, designated as Sections #1 (west spray field), and #2 (east spray field). An alternative future spray field (#3) is located between sections #1 and #2 and encompasses an additional 10 acres of land area but is not authorized to be used at this time (additional soil investigations and an application to modify the license is required prior to using section #3 in the future). Wastewater is directed to the individual sections by control valves on the force main. Spray irrigation is accomplished using 360° sprinkler type nozzles. Each sprinkler will have a radius of approximately 30 feet. The main line will have feeder lines off from them; each feeder line will have subsection laterals. The subsection laterals will be the main feed line for the sprinklers. The sprinklers and subsection laterals will be evenly spaced at about 60 feet to minimize spray drift, spray overlap and to minimize unused spray areas.

A McCrometer flow meter will be installed in the force main pipe for total calculation of gallons pumped to the spray field. The flow meter is removable for inspection and maintenance. The flow meter will be inspected once per month for debris and unusual wear.

The maximum volume spray irrigated will be based on the actual volume delivered to the site from the production facility and be limited to the maximum amount authorized in Special Condition A.2 of this license.

The spray site is on or near the top of a northwest to southeast oriented glacial moraine ridge with glacial till in the uplands, glaciolacustrine and marine sediments in the lowlands and along the moraine toe slopes. The glacial moraine ridge is dominated by very deep, well drained, loamy over sandy and gravelly deposits. The lower topographic positions on the southeast side slope of the moraine are dominated by very deep, moderately well drained, loamy over sandy and gravelly deposits. The toe slopes and lowlands, southeast of the site are dominated by very deep, somewhat poorly drained and poorly drained silty glaciolacustrine and marine deposits.

Soils in the spray irrigation area are characterized as Monadnock to Waumbek glacial till. Monadnock and Waumbek have a well-drained to moderately well-drained soil drainage class. Slopes are gently sloping to moderately steep on the ridge and gently sloping along the toe slopes and in the lowlands. The site is wooded and undeveloped, except for the railroad bed that runs between the proposed wastewater lagoon area to the southeast and the proposed wastewater spray irrigation area to the northwest.

**2. CONDITIONS OF THE LICENSE**

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System.

**3. RECEIVING WATER QUALITY STANDARDS**

Maine law, 38 M.R.S.A § 470 indicates the groundwater at the point of discharge is classified as Class GW-A receiving waters. Maine law, 38 M.R.S.A., §465-C describes the standards for Class GW-A waters as the highest classification of groundwater and shall be of such quality that it can be used for public water supplies. These waters shall be free of radioactive matter or any matter that imparts color, turbidity, taste or odor which would impair the usage of these waters, other than occurring from natural phenomena.

**4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Groundwater Monitoring Wells

The five groundwater monitoring wells and their approximate locations adjacent to the lagoons and within the spray-irrigation fields are shown on a plan attached to this Fact Sheet. The five monitoring wells are:

Monitoring Wells	PCS Code	Location
MW-008A	008A	Located at the southeast down gradient of both lagoons
MW-008B	008B	Located at the northeast corner of Lagoon No. 2 and Northerly of MW-008A
MW-008C	008C	Located westerly of Lagoon No. 1 and up gradient of both Lagoons.
MW-SFE	MWSFE	Located in the East Spray Irrigation Field.
MW-SFW	MWSFW	Located in the West Spray Irrigation Field.

These ground water wells shall be monitored in this licensing action.

Effluent and Groundwater Monitoring

The Department has established lagoon effluent, spray irrigation, and groundwater monitoring parameters in order to provide consistency across similar facilities now licensed by the Department. Monitoring parameters include *Depth to Water Level Below Landsurface, Nitrate-Nitrogen, Specific Conductance, Temperature, pH, Total Suspended Solids (TSS) Total Kjeldahl Nitrogen, COD and Certain Pesticides*. To be consistent with other similar licenses groundwater sampling shall now be conducted in May, and October.

#### 4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONT'D)

##### Monitoring Parameters

Slow rate land irrigation treatment is an environmentally sound and appropriate technology for best practicable treatment and disposal of waste water. The theory behind surface waste water disposal systems is to utilize the top 10-12 inches of organic matter and in-situ soils to attenuate the pollutant loadings in the applied waste waters. The soils and vegetation within the spray field area will provide adequate filtration and absorption to preserve the integrity of the soil, and both surface and ground water quality in the area.

The applicant shall periodically monitor the lagoon effluent, spray irrigation fields, and ground water monitoring locations on site at the specified frequencies and locations as called for in Special Condition A of this license.

*Biochemical Oxygen Demand & Total Suspended Solids (BOD<sub>5</sub> & TSS)* –BOD is the rate at which organisms use the oxygen in waste water while stabilizing decomposable organic matter under aerobic conditions. BOD measurements indicate the organic strength of wastes in water. The Department has established a “Report” requirement at this time for BOD while reserving the possibility to establish a numeric limit in the future based on BPT technology or other relevant factors. TSS consists of both settleable and nonsettleable solid materials contained in the waste water. The Department has established a “Report” requirement in this licensing action. Monitoring for these parameters yields an indication of the effectiveness of the lagoon treatment process and the condition of the waste water being applied.

*pH* – No numeric limits were established for pH in this license as the soil conditions and blueberry growing medium requires more acidic conditions than typical biologic treatment facilities. The licensee is required to report pH in standard units. pH is considered a “field” parameter meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance level monitoring parameter that is used as an early-warning indicator of potential ground water contamination and the monitoring frequency of twice per year is established for monitoring well testing and four times per year for lagoon effluent.

*Chemical Oxygen Demand* – Chemical Oxygen Demand (COD) is a measure of the oxygen consuming capacity of organic matter present in wastewater. This analysis is not necessarily related to BOD as the chemical oxidant may react with substances that bacteria do not stabilize. In this licensing action, the COD limit is being established as a report only monitoring requirement.

*Specific Conductance* – Specific conductance is considered a “field” parameter, meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance level monitoring parameter that is used as an early-warning indicator of potential ground water or surface water contamination and is being carried forward from the previous licensing action.

#### 4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONT'D)

*Insecticides, Fungicides, Herbicides* – Farmers may utilize insecticides (phosmet), fungicides (chlorothalonil, propiconazole), and other pesticides on the crop at various times during berry producing years. Based on varying persistences of these chemicals in water and soil, in consideration of preharvest time of application requirements, and based on the concentration of these chemicals in facility waste water, the Maine Board of Pesticide Control has recommended that levels of each of these chemicals be monitored in lagoon effluent, and groundwater monitoring locations, as documented below. Sampling for this parameter in the lagoon effluent, and monitoring wells shall be conducted according to the frequency and methods indicated. If analysis indicates the presence of chlorothalonil, propiconazole, or phosmet in the lagoon effluent at or above the Maine Maximum Exposure Guideline (MEG of 45 ppb, 9 ppb and no MEG respectively) as established by the Bureau of Health, Maine Department of Human Services 01/20/00, the licensee shall conduct sampling for the parameter in the ground water monitoring locations during the next scheduled sampling event. Monitoring for phosmet in the storage lagoon effluent and in groundwater (when applicable) is still required by this license.

Freshly harvested fruit processed at the Maine Wild Blueberry facility in Machias may contain certain pesticides. After the first year of sampling has been completed, if no pesticides are detected, then MWB may request to modify the sampling frequency of pesticides or request that the pesticide testing be held in abeyance indefinitely. The Department may approve a modification based on site specific data that demonstrates little or no risk of pesticide residue remaining on the blueberry crop or waste water processed by the facility.

Special Condition A, Footnote 3 of the license contains analytical methods and MEG based limits recommended by the Maine Board of Pesticide Control and/or the USEPA and required in this licensing action. Requirements for monitoring and analysis methods are based on Best Professional Judgement.

*Application Rates (Weekly)* – The weekly maximum rate of 54,300 gallons per acre (2.0 inches per week) is being established in this licensing action. The weekly limit is based on the characteristics of in-situ soils and provide protection against hydraulically overloading, and preventing runoff from, the spray irrigation area.

*Nitrate-nitrogen, total Kjeldahl nitrogen, total nitrogen (as N)*– Nitrogen assumes different forms depending upon the oxidation-reduction conditions in the soil and ground water. The presence of a particular form of nitrogen indicates the nutrient attenuation capacity of the spray site. The monitoring requirements included in this licensing action for nitrate nitrogen and total Kjeldahl nitrogen (TKN) in ground water as well as nitrate-nitrogen and TKN in the lagoon effluent and total nitrogen and at the spray irrigation sites are important in determining the effectiveness of the treatment process. The monitoring well sampling can also help identify chronic leakage from the lagoon or overloading of the spray sites. The spray area sampling requirement addresses the efficiency of the site in attenuating the pollutant loading, helping to safeguard against exceeding the ability for plant uptake which would result in accumulation of excess nitrogen in the site. Nitrogen compounds can indicate human health concerns if elevated in a drinking water supply. The 10 mg/l limit for nitrate nitrogen in monitoring wells is based on state and federal drinking water standards.

#### **4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONT'D)**

The Department considers the required monitoring for various forms of nitrogen in ground water and at the spray sites to provide accurate and sufficient analysis of site conditions and effects from the treatment process. In this licensing action, the spray field nitrogen limit is being established as a report only monitoring requirement.

*Depth to Water Level Below Land Surface* – Measuring the distance from the ground level to the ground water surface in monitoring wells will be used to monitor representative groundwater conditions.

*Temperature* – Temperature is considered a “field” parameter, meaning that it is measured directly in the field via instrumentation and does not require laboratory analysis. It is considered a surveillance level monitoring parameter that is used as an early-warning indicator of potential ground water contamination and is being carried forward from the previous licensing action.

#### **5. MAINTAIN ADEQUATE BUFFERS AND LAND FOR REPLACEMENT**

The licensee is expected to provide adequate buffers from other land uses, and retain where possible land for system expansion or replacement.

#### **6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY**

As licensed, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class GW-A classification.

#### **7. SYSTEM CALIBRATION**

Discharge rates, application rates and uniformity of application change over time as equipment gets older and components wear, or if the system is operated differently from the assumed design. Operating below design pressure greatly reduces the coverage diameter and application uniformity (resulting in increased ponding). For these reasons, the licensee shall field calibrate their equipment on a regular basis to ensure proper application and uniformity, and when operating conditions are changed from the assumed design.

Calibration involves collecting and measuring flow at several locations in the application area (typically a grid pattern of containers with uniform diameters). Rain gauges work best because they already have a graduated scale from which to read the application amount without having to perform additional calculations. Attachment “2” of this Fact Sheet entitled “*Example Spray Irrigation Field Calibration Report Form*” is provided as an aid to the licensee in the recalibration process. It is recommended that this form or a similar form be submitted to the Department Compliance Inspector shortly after relicensing and annually thereafter, or whenever operating conditions are changed from assumed design parameters.

## 8. PUBLIC COMMENTS

Public notice of this application was made in a newspaper with general circulation in the area of Maine Wild Blueberry Company operations on or about April 3, 2006. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

## 9. DEPARTMENT CONTACTS:

Additional information concerning this licensing action may be obtained from and written comments should be sent to:

David Silver  
Division of Water Quality Management  
Bureau of Land and Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017  
Telephone (207) 287-3901

## 10. RESPONSE TO COMMENTS

### Comments received by the Department from Nancy Oden;

The comments received from Nancy Oden relate to four distinct aspects of the application submitted to the Department. The aspects can be categorized as follows; (1) the licensing program process (Procedural and Historic Activities) and findings / conclusions of the draft license that was previously distributed related to (2) the waste water characteristics generated by, and location where discharged by Maine Wild Blueberry Company, (3) the proposed lagoon capacity, and (4) the vehicle and pipeline access to the site. Each of these aspects are discussed below.

### **(1) Procedural and Historic Activities**

*Comment 1A. The Board of Environmental Protection (BEP) should review the project and the BEP should decide if a license is warranted. And the request for a Public Hearing in this matter should have been heard by the BEP.*

Response to Comment 1A. On May 24, 2006, the Commissioner of the Department of Environmental Protection responded directly to Nancy Oden's comments indicating that Department Regulations, *Chapter 2, Rules Concerning the Processing of Applications*, set forth the criteria when the BEP would assume jurisdiction over applications and when a Public Hearing on an application that has been submitted to the Department is warranted. In accordance with the Rules, The Board shall assume jurisdiction over the application when it finds that the application involves (1) a policy, rule or law that the Board has not previously interpreted; (2) important policy questions that the Board has not resolved; (3) important policy questions or interpretations of a rule or law that requires reexamination; or (4) substantial public interest (i.e. has the potential to affect a broad geographical area or natural resource of statewide significance, or has generated more than local interest).

## 10. RESPONSE TO COMMENTS (Cont'd)

The Commissioner has determined that these requirements have not been met in this case. Therefore, the Department did not recommend that the Board assume jurisdiction over the matter or hold a Public Hearing in this matter.

Additionally, the Commissioner noted in a supplemental reply (on June 16, 2006) to Nancy Oden that the BEP received both the request for Board jurisdiction and the request for a Public Hearing on the matter, in that the Department conveys requests and responses to the BEP Chair and BEP Executive Analyst. It was noted that the entire board was provided with copies of the requests and Department reply. The Commissioner provided a briefing summary during the BEP meeting where the Board did not express an interest in holding a Public Hearing or assume jurisdiction over the application.

*Comment 1B. Cherryfield Foods has had a terrible record with the Maine Department of Environmental Protection over the years, so I would have thought the application would have received more than the one required so-called "informational" meeting and a cursory glance by DEP before issuing a permit, as if this were a routine application.*

Response to Comment 1B. There are no Department records indicating violation of waste water discharge laws or regulations by operations at the Maine Wild Blueberry Company. However, the Board of Environmental Protection and Cherryfield Foods (company associated with Maine Wild Blueberry Company by and through parent corporation Oxford Frozen Foods) entered into an Administrative Consent Agreement whereby Cherryfield Foods agreed to modify its operational practices. It is noted that in 2001, Maine Wild Blueberry Company retained the services of an Environmental Coordinator (Daniel Bowker) who has overseen operations and ensured compliance with the various provisions of permits and licenses issued by the Department to Maine Wild Blueberry Company and Cherryfield Foods. Since 2001 there is no record of any environmental violations or operational best management practices implemented by Cherryfield Foods, Maine Wild Blueberry Company, or Oxford Frozen Foods. Therefore, the Department has concluded that Maine Wild Blueberry Company has the technical ability to satisfy the regulatory requirements outlined in the License to be issued for the spray irrigation operations in Jonesboro.

### **(2) Waste water characteristics**

*Comment 2A. We know there are pesticides in this wastewater because wastewater from this same factory was tested by DEP a few years ago and found to contain several pesticides. [Certain spray materials were cited by this commenter, including Guthion, and Velpar, as being not appropriate to find in drinking or bathing water]. The commenter states that "The people of Washington County have long subsidized the 'wild' blueberry processors by allowing them to aerially spray poisons into our breathing air and drinking water to the point where Velpar, a long-lasting herbicide mixed with other chemicals, is in the Machias and other towns' drinking water. This is unacceptable and it is DEP's responsibility to see to it that corporations are not permitted to contaminate our waters."*

## 10. RESPONSE TO COMMENTS (CONT'D)

Response to Comment 2A. The Department has reviewed this application consistent with current environmental assessment techniques and consulted with various state agencies related to the issue of ground water protection. The Department has consulted with and obtained documentation related to pesticide, herbicide, fungicide, and other spray material use and their fate and transport prepared by the State of Maine, Department of Agricultural, Board of Pesticide Control that describes the parameters of concern and testing protocols to be implemented to determine suitable sampling provisions. The conclusions from this consultation and documentation indicate that while the concentrations of these compounds are expected to be low, sampling and verification that the concentrations are below the Maximum Exposure Guidelines is warranted. Therefore, the Department finds that the applicant has made suitable provisions for the safe discharge of waste water with regard to maintaining and protecting ground water resources, surface water resources, wildlife and fish and any other applicable regulatory or statutory requirements.

*Comment 2B. Commenter states that the "[A]pplication says the glacial moraine runs northwest to southwest. That is physically highly unlikely."*

Response to Comment 2B. Typographical clerical error should have indicated that the moraine runs from northeast to southwest. The final draft has corrected this error.

### (3) Lagoon Capacity

*Comment 3. All this precipitation will rather quickly fill up and overflow these lagoons, so that soil in the area quickly becomes saturated with this pesticide-contaminated factory wastewater. With overflow and leakage from the lagoons, as well as the spraying of factory waste water on the land, there is also the danger of over-saturation of these unstable soils, leading to erosion of the land, as well as weakening and undermining of the railroad bed, which is owned by the public, and for which there are plans [to use in the future].*

Response to Comment 3. The application includes assessment of the past waste water generated by Maine Wild Blueberry Company during the most recently available data. The data includes a full year of production. Production generated waste water amounted to 4,652,000 gallons (4.65 MG) during the period between October 2004 and September 2005. The proposed lagoons are designed to contain approximately 3,080,000 gallons (3 MG). In addition, there are two tanks at the Maine Wild Blueberry processing facility that each have a capacity of 0.45 MG for a total production facility storage tankage of 0.9 MG, or a total available storage volume of 3.9 MG.

The spray irrigation area is designed to discharge up to 54,300 gallons per acre per week. Since there are 21.5 acres in the spray irrigation area, the facility could discharge 1,167,450 per week, or a total of 36,190,950 gallons over the course of the year. Given the generation of 4.65 MG and a optimal discharge volume of 1.1 MG per week, the facility could discharge the entire annual waste water generation volume in less than five (5) weeks of spray irrigation.

## 10. RESPONSE TO COMMENTS (CONT'D)

It is noted that all waste water has to be trucked to the lagoons from the processing facility. The truck operator is required to observe the lagoon freeboard levels and is not to off-load the truck tank volume if there is less than two feet of freeboard in the lagoons, thus providing safeguards against the possibility of the lagoon overtopping.

The topography of the site indicates that the lagoons are downgradient from the railbed and also from the spray irrigation area. Therefore, any waste water that has been discharged to the lagoon cannot flow toward the rail bed thus alleviating the possibility of saturating the rail bed or causing erosion of the rail bed embankments. Therefore, the Department finds that the applicant has made satisfactory provisions to ensure the lagoon waters will not overtop lagoon embankments or cause or contribute to saturated soil conditions.

### (4) Access to the Site

*Comment 4A. Commenter indicates that a disused railroad bed runs between the lagoon and the irrigation area. Perhaps DEP and Cherryfield Foods are unaware that Maine Department of Transportation is proposing to turn those railroad tracks into a 'rail to trails*

Response to Comment 4A. The Maine Department of Transportation (MDOT) has reviewed the proposed railbed crossing by vehicles and pipes conveying waste water from the lagoons to the spray irrigation area. MDOT has indicated that crossings of this type are usual and customary for the area. MDOT has issued written authorization to Maine Wild Blueberry to cross the corridor with vehicles and pipe lines to facilitate the proposed project, in the form of a MDOT crossing permit. Therefore, the DEP finds that the applicant has the necessary and appropriate authorization to traverse this area consistent with applicable standards.

**Water Quality Monitoring Plan Details**  
**Bureau of Land & Water Quality, Div. of Environmental Assessment**

**Attachment "1"**

For projects required to monitor the quality and/or levels of surfacewater or groundwater, a water quality monitoring plan/protocol document must be provided as a separate manual, for ease-of-reference by the applicant, consultants, and the Department. This manual must be prepared, signed, and dated by a professional qualified in water chemistry interpretation (and when groundwater flow interpretations and monitoring well selection are conducted to prepare the plan, endorsed by a Certified Geologist), and must include the following, at a minimum:

1. Identification/summary of all monitoring points (e.g. monitoring wells, lysimeters, springs, etc.) to be used for measurement of water levels or for water quality analysis. Monitoring points must have an assigned identification symbol (alpha/numeric), and, where appropriate, elevation referenced to an established, permanent benchmark. Include a map showing all monitoring points.
2. Outline of the monitoring frequency at each monitoring point, by the number of sampling/analysis events per year (e.g. quarterly, etc.) and by month (e.g. April, September, etc.).
3. Provision for obtaining adequate data on background water quality and/or levels, and for using a statistically-valid method for determining a significant increase in parameter concentrations (e.g. contamination levels, but not necessarily MCL's/MEG's). At a minimum, determination of background water quality or levels must consist of quarterly sampling/analysis for 1 year.
4. List of parameters to be analyzed, including references to the laboratory analysis methods to be utilized for each parameter, detection limits for each analysis method, and the MCL's/MEG's for all applicable parameters. All monitoring must include field parameters (conductivity, temperature, pH, and TDS), in addition to parameters specific to the monitoring program objectives.
5. Identification of the qualified personnel to take water level measurements and water quality analysis samples. These tasks should not be done by the applicant or employee of the applicant, but if proposed, then item 6 below must be addressed.
6. Written certification from a qualified expert that personnel to conduct monitoring are or will be adequately trained to properly collect measurements and/or samples by approved methods and protocols.
7. Description of the equipment and methods to be employed for water level measurement and/or water quality analysis sample-taking.
8. Description of the quality assurance/quality control and chain-of-custody protocols to be followed for water quality sampling, preservation, storage, transport, and laboratory analysis.
9. Provision for a professional qualified in water chemistry or groundwater flow interpretation to summarize, evaluate, and provide recommendations on the monitoring results that is submitted annually to the Department, unless a problem is evident, in which case the Department is to be notified immediately. Annual reports must include historical, as well as the most recent year's monitoring data for each monitoring point, which is presented in a tabular format. Reports must be signed/dated by the professional responsible for their preparation.
10. A provision that, if water levels or water quality monitoring results indicate adverse effects are occurring as a result of the project activity, then an evaluation will be made by a qualified professional and an appropriate remedial action/mitigation plan will be developed and submitted to the Department for re-view and approval.

**Example Spray Irrigation Field Calibration Report Form  
Attachment "2"**

**Background Data**

Describe the reasons for system re-calibration (example annual calibration or change in operating conditions). When there has been a change in operating conditions list the specific changes such as new components (pumps, spray heads, size or type of pipes, etc.) or previously approved design changes.

Describe the current method for estimating the flow of wastewater to the irrigation area, ie, meter or pump calibration data. When using pump calibration data list the estimated flow rate of the pump for the existing site conditions (example gallons per minute). Also note the assumed diameter of coverage for the individual spray heads and the resulting area of application (acreage). Based on this information what is the assumed application rate in inches per hour and gallons per acre. Note: 1 acre-inch equals 27,150 gallons.

**System Calibration**

Describe or attach illustrations of the system calibration procedure, ie, grid layout or rain gauge or other uniform containers.

List the actual radius of spray coverage of the individual spray heads as measured during the field calibration and note any application uniformity problems such as noticeable ponding or uneven applications.

Calculate the acreage of the application based on the actual radius of coverage measured in the field. Show calculations.

Example:  $(27,150 \text{ gallons/acre/week})(1.5 \text{ inch/week})(1.3 \text{ acres}) = 52,942 \text{ gallons/week}$

Calculate the estimated hourly application rate in inches per hour and gallons per acre obtained during the above calibration. Show calculations.

**New Calibration Data**

What changes to the estimates of wastewater flow are proposed, if any and why? And are the licensed application rates satisfied?

Any adjustments to improve uniformity of spray applications?

Submitted by: Signature of Operator in Responsible Charge	On Date:
Reviewed by: Signature of Operator in Responsible Charge	On Date:

BY VEAR DATE 2-14-06

PLANET WASTEWATER SERVICES, INC.  
457 Front Street  
Richmond, ME 04357

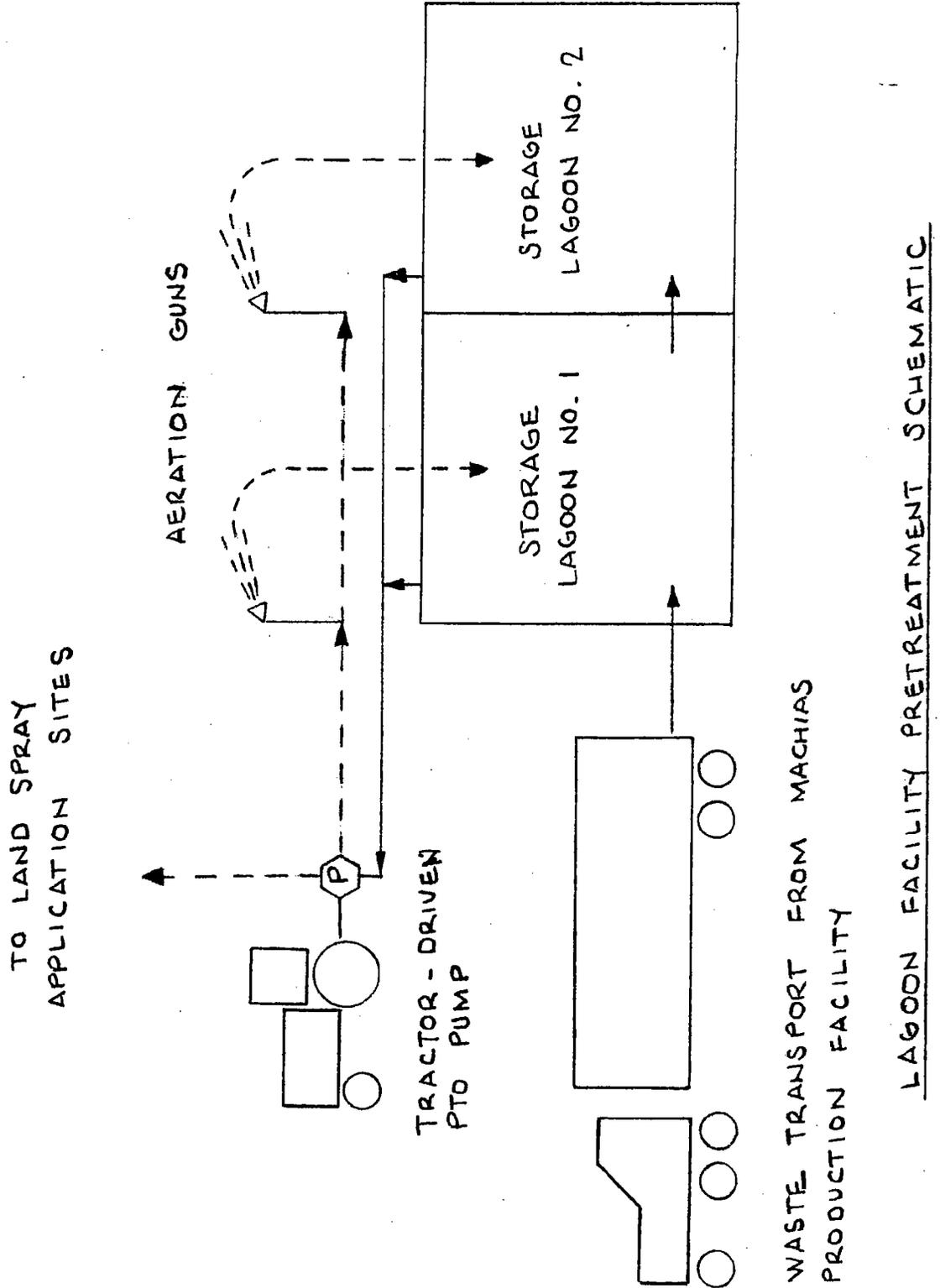
SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

CHCKD. BY \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NO. \_\_\_\_\_

PROJECT \_\_\_\_\_

BOOK NO. \_\_\_\_\_



BY YEAR DATE 2-14-06

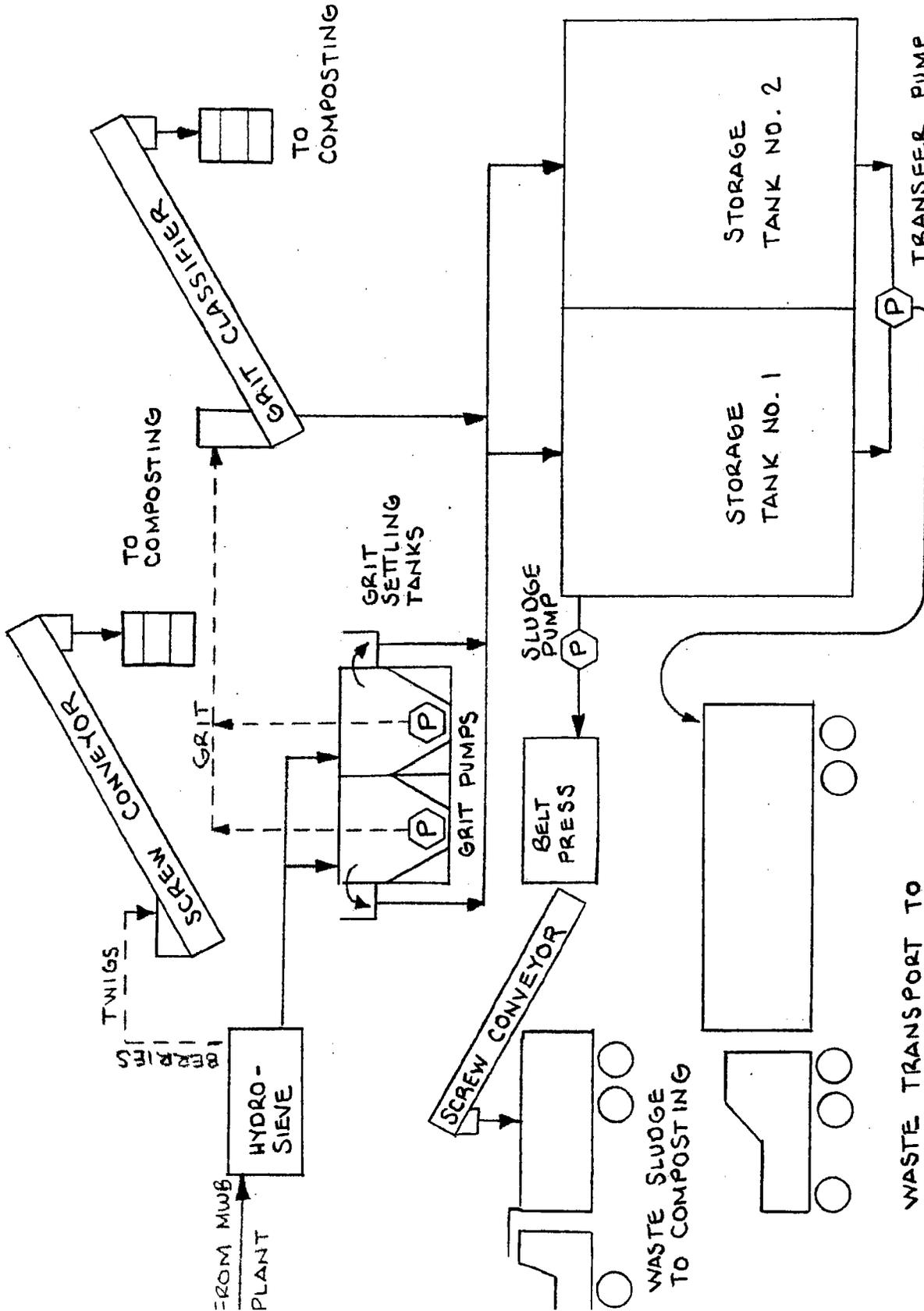
PLANET WASTEWATER SERVICES, INC.  
457 Front Street  
Richmond, ME 04357

SHEET NO. OF

CHKD. BY DATE

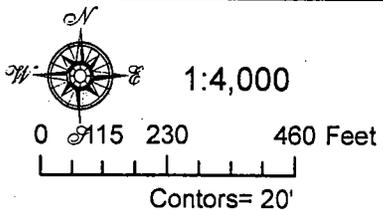
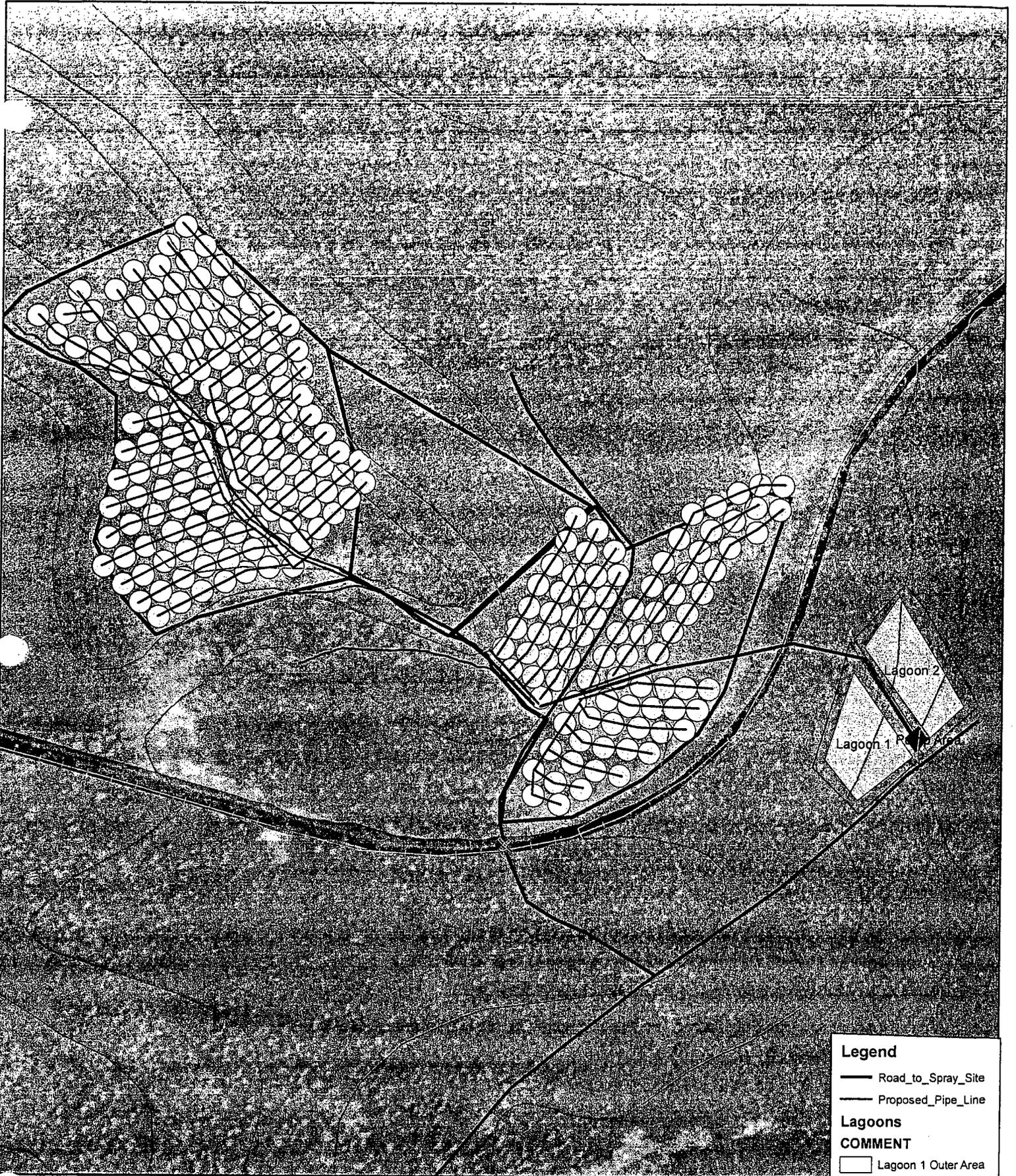
PROJECT NO.

PROJECT BOOK NO.



WASTE TRANSPORT TO  
JONESBORO LAGOONS

PRODUCTION FACILITY PRETREATMENT SCHEMATIC



# MAINE WILD BLUEBERRY SITE MAP W/ Sprinklers

Map By: Daniel Bowker

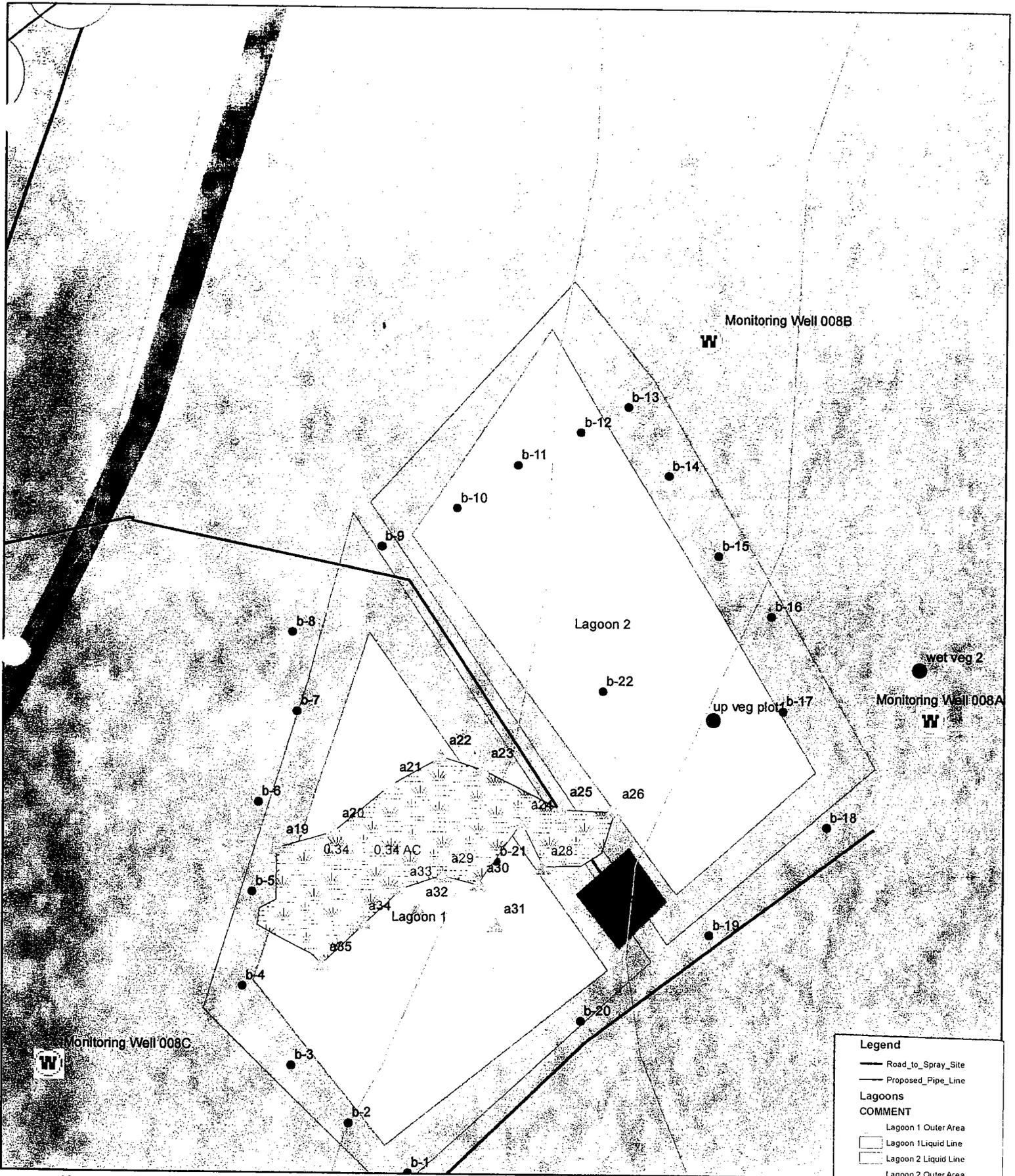
**Legend**

-  Road\_to\_Spray\_Site
-  Proposed\_Pipe\_Line

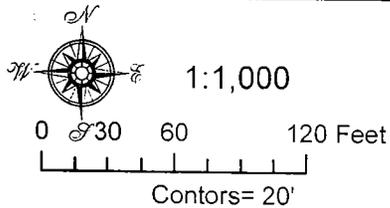
**Lagoons**

**COMMENT**

-  Lagoon 1 Outer Area
-  Lagoon 1 Liquid Line
-  Lagoon 2 Liquid Line
-  Lagoon 2 Outer Area
-  Downeast\_railroad
-  Sprinklers
-  Spray\_Area

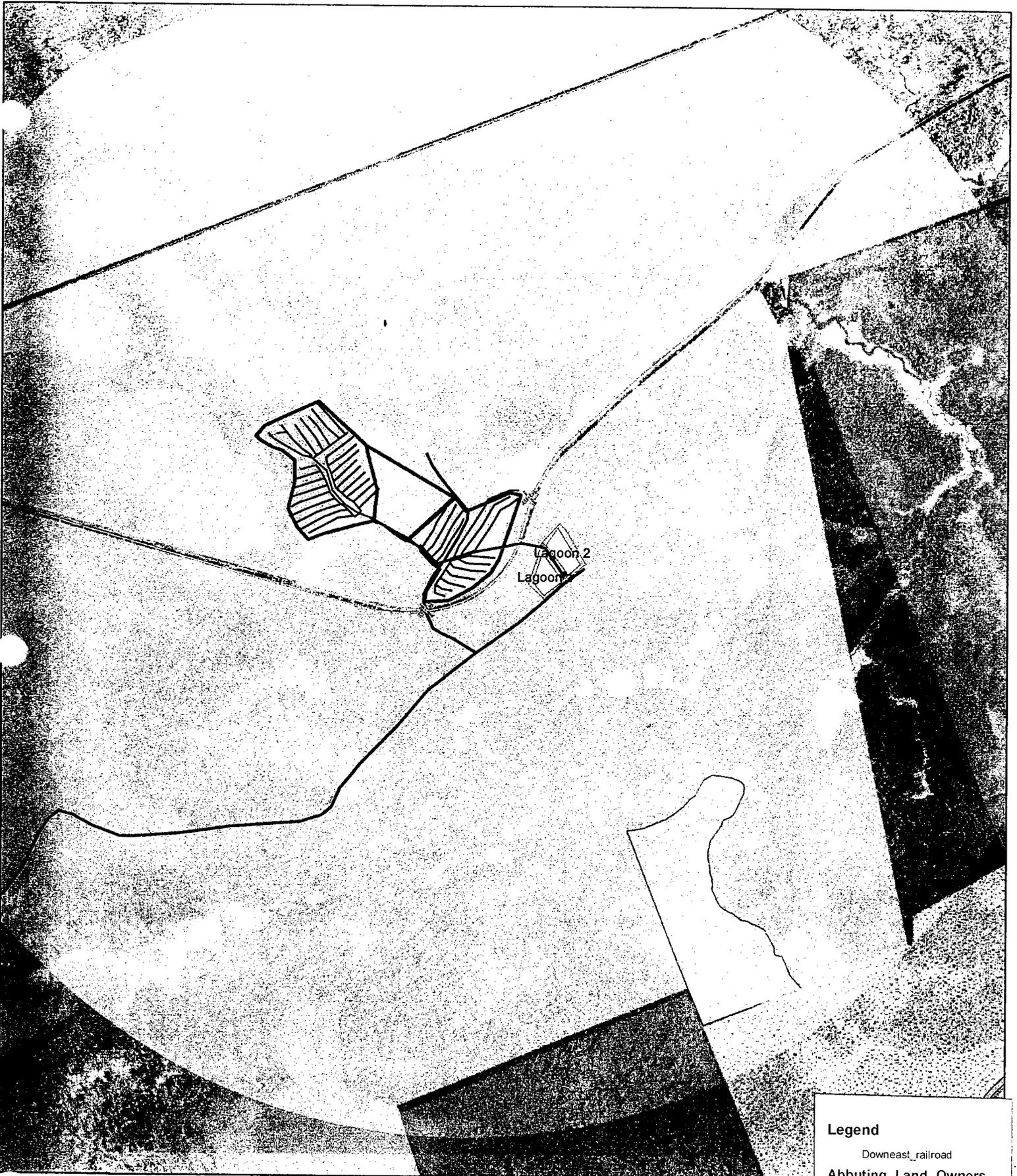


# MAINE WILD BLUEBERRY Site Map W/Wetland Area

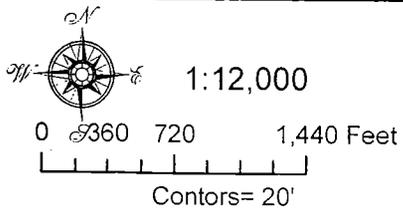


- Legend**
- Road\_to\_Spray\_Site
  - Proposed\_Pipe\_Line
- Lagoons**
- COMMENT**
- Lagoon 1 Outer Area
  - Lagoon 1 Liquid Line
  - Lagoon 2 Liquid Line
  - Lagoon 2 Outer Area
- Test Borings**
- <all other values>
- Type**
- W Monitoring Well
  - Test Boring
  - Wetland Boundary

Map By: Daniel Bowker



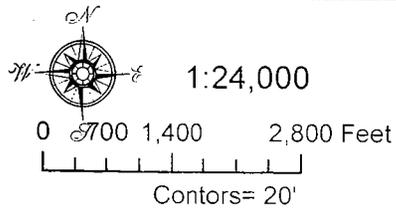
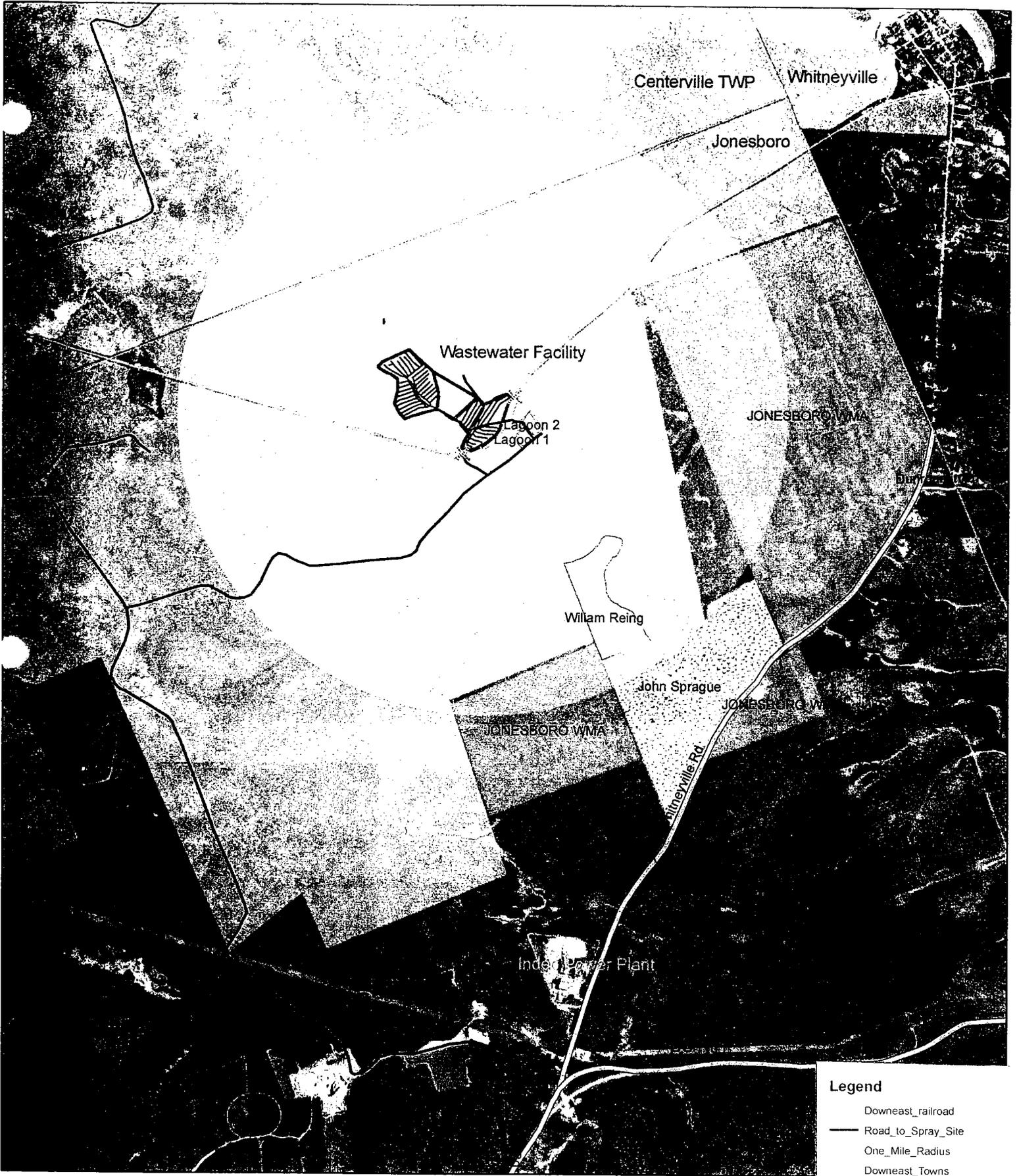
# MAINE WILD BLUEBERRY SITE MAP w/ Landowners



## Legend

- Downeast\_railroad
- Abutting\_Land\_Owners
- COMMENT
- John Sprague
- William Reing
- ME\_Wildlife\_Game\_Preserve
- One\_Mile\_Radius
- Downeast\_Towns

Map By: Daniel Bowker



# MAINE WILD BLUEBERRY SITE MAP of Landowners

Map By: Daniel Bowker

### Legend

- Downeast\_railroad
  - Road\_to\_Spray\_Site
  - One\_Mile\_Radius
  - Downeast\_Towns
- Abutting\_Land\_Owners  
COMMENT**
- John Sprague
  - William Reing
  - ME\_Wildlife\_Game\_Preserve
  - Gupfili\_Ownership