STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

January 13, 2012

VIA ELECTRONIC MAIL

Mr. David Keith, Superintendent
Carrabassett Valley Sanitary District
Village West #35
Carrabassett Valley, ME 04947
dskeith@tds.net

RE: Maine Compliance Tracking #MEU502781
Maine Waste Discharge License (WDL) Application #W002781-6B-H-R
Final License – Carrabassett Valley Sanitary District

Dear Mr. Keith:

Enclosed please find a copy of your **final** Maine MEPDES Permit/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 license 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 contact me at (207) 287-7658 or via email at: phyllis.a.rand@maine.gov.

Sincerely,

Phyllis Arnold Rand

Phyllis Arnold Rand
Division of Water Quality Management
Bureau of Land and Water Quality

Enclosure

Cc: Beth DeHaas, DEP/CMRO Lori Mitchell, DEP/DMU Sandy Mojica, EPA

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

DEPARTMENT ORDER
IN THE MATTER OF

CARRABASSETT VALLEY SANITARY DISTRICT	)	PROTECTION AND
CARRABASSETT VALLEY, FRANKLIN CO., MAINE	)	IMPROVEMENT OF WATERS
PUBLICLY OWNED TREATMENT WORKS	)	
SURFACE WASTE WATER DISPOSAL	)	
MEU502781	)	WASTE DISCHARGE LICENSE
W002781-6B-H-R **APPROVAL**	)	**RENEWAL**

Pursuant to *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of CARRABASSETT VALLEY SANITARY DISTRICT (licensee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The licensee has applied to the Department for renewal of Waste Discharge License (WDL) #W002781-5L-F-R that was issued on December 22, 2006 and expired on December 22, 2011. The licensee operates surface waste water disposal systems that discharge up to 100,000 gallons per acre per week of treated sanitary waste water during the spring, summer and fall seasons (April 15 – November 15) onto a 43-acre spray area and up to 54 million gallons of freeze-crystallized waste water (snowmaking) and/or treated sanitary waste water during the winter onto a 32-acre snowmaking area. A site location map is included as **Attachment A** of the attached Fact Sheet.

LICENSE MODIFICATION REQUESTED

The licensee is requesting an increase in the volume of septic tank wastes received from 120,000 gallons per year, 25,000 gallons per month (September – November) and 5,000 gallons per month (December – August) to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, in order to better serve its customers.

LICENSE MODIFICATION GRANTED

The Department is granting the licensee an increase in the volume of septic tank wastes received to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, based on the licensee's compliance history and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555 (last amended March 9, 2009).

LICENSE SUMMARY

Terms & Conditions: This licensing action is carrying forward all the terms and conditions with the following exceptions. This licensing action is different in that it is:

1. Modifying groundwater monitoring measurements from the nearest one-hundredth ($1/100^{th}$) of a foot to the nearest one-tenth ($1/10^{th}$) of a foot in order to maintain consistency with similar licenses.

2. Modifying the Treatment Plant Operator Certification requirement to include an SITS-II certificate or higher.

3. Increasing the allowable volume of septic tank wastes received to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, based on the licensee's compliance history and 06-096 CMR 535.

4. Modifying the requirement to maintain lagoon freeboard levels at a minimum of three (3) feet or at design level, whichever is greater, to two (2) feet or at design level, whichever is greater, in order to maintain consistency with similar licenses.

5. Eliminating the requirement for the licensee to submit a Water Quality Monitoring Plan in order to maintain consistency with similar licenses.

6. Eliminating the requirement for the licensee to submit a Spray Irrigation Performance Report in order to maintain consistency with similar licenses.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated January 10, 2012, 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 natural 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

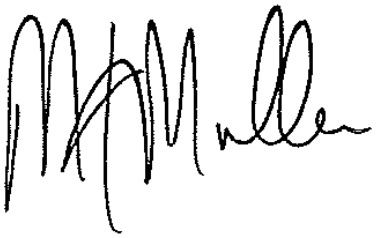
THEREFORE, the Department APPROVES the above noted application of the CARRABASSETT VALLEY SANITARY DISTRICT to operate a surface waste water disposal system that discharges up to 100,000 gallons per acre per week of treated sanitary waste water during the spring, summer and fall seasons to the spray irrigation areas, and to discharge a maximum of 54 million gallons per year of freeze-crystallized waste water (snowfluent) or liquid waste water as spray irrigation to the spray irrigation/snowmaking area, onto soil above groundwater, Class GW-A, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

1. "Standard Conditions of Approval for POTW Waste Discharge Licenses," dated July 16, 1996, copy attached.

2. The attached Special Conditions, including effluent limitations and monitoring requirements.

3. This license becomes effective upon the date of signature below and expires at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this license, the authorization to discharge and the terms and conditions of this license and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES



This permit is digitally signed by Michael Mullen on behalf of Commissioner Patricia Aho. It is digitally signed pursuant to 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date.
2012.01.17 16:58:49 -05'00'

Date of initial receipt of application: October 25, 2011
Date of application acceptance: October 27, 2011

This Order prepared by Phyllis Arnold Rand, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. The licensee is authorized to operate a surface waste water treatment and disposal system. The **LAGOON EFFLUENT**[1, 6] (**OUTFALL #001)** shall be limited and monitored as specified below.

	Weekly Maximum[4]	Daily Maximum	Minimum Measurement Frequency	Sample Type
Lagoon Influent Flow *[50050]*	Report, gal/week *[8G]*	Report, gal/day *[07]*	1/Day *[01/01]*	Meter *[MT]*
Lagoon Level, Freeboard *(in Lagoons #4 and #7)** *[82564]*	---	Report, Feet[1] *[27]*	1/Week *[01/07]*	Measure *[MS]*
Biochemical Oxygen Demand *[00310]*	---	100 mg/L *[19]*	1/Month[2] *[01/30]*	Grab *[GR]*
Total Suspended Solids *[00530]*	---	100 mg/L *[19]*	1/Month[2] *[01/30]*	Grab *[GR]*
Nitrate-Nitrogen *[00620]*	---	Report mg/L *[19]*	1/Month[2] *[01/30]*	Grab *[GR]*
Specific Conductance *[00095}*	---	Report (umhos/cm) *[11]*	1/Month[2] *[01/30]*	Grab *[GR]*
Temperature (°C) *[00010]*	---	Report (°C) *[15]*	1/Month[2] *[01/30]*	Grab *[GR]*
pH (Standard Units)** *[00400}*	---	6.0 – 9.0	---	--- - -
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Zinc *[01002, 01027, 01034, 01042, 01051, 71900, 01067, 01092]*		Report ug/L *[28]*	1/5 Years[3] *[01/5Y]*	Grab *[GR]*

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

*** For reporting on DMRs, report the minimum freeboard recorded for the aerated lagoon. In the event that freeboard levels in any lagoon are two feet or less, then the Licensee shall notify the Compliance Inspector of the elevations, report freeboard levels on a daily basis, and provide a proposal to lower lagoon levels.**

******Licensee is required to maintain lagoon effluent between 6.0-9.0 standard units at any time. This licensing action does not require sampling and reporting of pH, however the licensee may be required to demonstrate compliance with this pH range at any time upon request from Department staff.

FOOTNOTES: Refer to pages 9-10 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. The **SPRAY IRRIGATION AREAS** shall be limited and monitored as specified below for land application between April 15th and November 15th of each year:

SIEA – Spray Irrigation East Area (Easterly Spray Irrigation Area – 23 acres)
SIWA – Spray Irrigation West Area (Westerly Spray Irrigation Area – 20 acres)

Parameter	**Monthly Total**	**Weekly Maximum***	**Minimum Measurement Frequency**	**Sample Type**
Application Rate				
SIEA	---	100,000 gallons per acre (5)	1/Week (4)	Calculate
SIWA	---	100,000 gallons per acre (5)	1/Week (4)	Calculate
[51125]		*[8G]*	*[01/07]*	*[CA]*
Flow – Total Gallons	Report (Gallons)	---	1/Month	Calculate
[82220]	*[80]*		*[01/30]*	*[CA]*

*Weekly maximum volume is based on an application rate of 100,000 gallons per acre at 3.7 inches per acre.

FOOTNOTES: Refer to pages 9-10 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

3. The **SPRAY IRRIGATION / SNOWMAKING AREA (SISA)** shall be limited and monitored as specified below:

SISA –Applies from January 1 – December 31 of each year

	Monthly Total as specified	**Year to Date Total** as specified	**Weekly Maximum Per acre** as specified (4)	**Measurement Frequency** as specified	**Sample Type** as specified
Flow – Total Gallons *[82220]*	Report (Gallons) *[80]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Flow – Total Gallons *[82220]*	---	54 million gallons* *[57]*	---	1/Month *[01/30]*	Calculate *[CA]*
Application Rate *[51128]*	---	---	100,000 gallons** *[57]*	1/Week (4) *[01/07]*	Calculate *[CA]*

***** The maximum amount of treated effluent that may be applied to the Spray Irrigation/Snowmaking Field (SISA) over the entire year is 54 million gallons. This annual 54 million gallon application volume may be applied as either snowmaking volume, spray irrigation volume, or a combination of both. Example, if 4 million gallons had been applied during the spray irrigation season to the SISA application area, then only 50 million gallons may be applied during the snowmaking season. An insulating snow cover that is maintained over the entire site of the snowmaking field during the fall and winter snowmaking period enhances snow melt infiltration in the soil.

**** The weekly maximum application rate only applies to treated effluent discharged as spray irrigation only and does not apply to the amount of effluent that can be discharged as treated snow effluent.**

FOOTNOTES: Refer to pages 9-10 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS

4. GROUND WATER MONITORING WELLS[6] MW1-MW11. *Sampling at MW4 is held in abeyance until further notice from the Department to the licensee.*

	Daily Maximum as specified	Minimum Measurement Frequency	Sample Type
Depth to Water Level Below Landsurface *[72019]*	Report (feet) *[27]*	2/Year *[02/YR]*	Measure *[MS]*
Nitrate-Nitrogen *[00620]*	10 mg/L *[19]*	2/Year *[02/YR]*	Grab *[GR]*
Specific Conductance *[00095}*	Report (umhos/cm) *[11]*	2/Year *[02/YR]*	Grab *[GR]*
Temperature (°C) *[00010]*	Report (°C) *[15]*	2/Year *[02/YR]*	Grab *[GR]*
pH (Standard Units) *[00400}*	Report (S.U.) *[12]*	2/Year *[02/YR]*	Grab *[GR]*
Total Suspended Solids *[00530}*	Report (mg/L) *[19]*	2/Year *[02/YR]*	Grab *[GR]*
Metals[3] (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc *[01002, 01027, 01034, 01042, 01051, 71900, 01067, 01092]*	Report (ug/L) *[28]*	1/5 Years *[01/5Y]*	Grab *[GR]*

The requirement to sample MW4 is held in abeyance subject to review by the Department and the determination that continued testing is required for MW4.

FOOTNOTES: Refer to pages 9-10 for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes – [Special Condition A(1), A(2), A(3) and A(4)]

Effluent sampling for all parameters shall be after the last treatment process on a year-round basis.

Sampling: 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 Health and Human Services. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended 2/13/00). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of the *Maine Comprehensive and Limited Laboratory Certification Rules*, 10-144 CMR263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

(1) Lagoon freeboard shall be measured and reported weekly for the aerated lagoon during the months of April through November, inclusive. Storage lagoon effluent shall be sampled at a point after the pump in the distribution line prior to being pumped to the spray field(s) and shall be representative of what is actually being applied to the fields. Any change in sampling location must be approved by the Department in writing.

(2) Lagoon effluent sampling shall occur monthly, four (4) times per year, during the months of (a) April or May, (b) June, (c) September, and (d) October or November of each year. In the event that no wastewater is disposed of via the spray irrigation system during the month, the licensee is not required to sample for effluent monitoring. The option of April or May and October or November provides additional flexibility to the operator to obtain the required data.

(3) Metals testing shall be done in the twelve-month period prior to the license expiration date.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes – [Special Conditions A(1), A(2), A(3) and A(4)]

(4) Weekly is defined as Sunday through Saturday. A spray field's daily or weekly application rate is the total gallons sprayed over the applicable period of time divided by the size of the wetted area of the field(s) utilized. Note: 27,152 gallons is equivalent to one acre-inch. 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.

(5) For Discharge Monitoring Report (DMR) reporting purposes, each month the licensee shall report the highest weekly application rate for the weeks ending that month.

(6) Monitoring wells shall be sampled during the months of May and October of each year. Depth to water level shall be measured to the nearest one-tenth ($1/10^{th}$) of a foot as referenced from the surface of the ground at the base of the monitoring well. 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 waste water 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 immediately to the Department, and may necessitate the need for additional ground-water testing requirements.

B. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade SITS-II** certificate or higher (or Registered Maine Professional Engineer) pursuant to Title 32 M.R.S.A. §4171 *et seq*. and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the licensee may engage the services of the contract operator.

C. AUTHORIZED DISCHARGES

The licensee is authorized to discharge treated waste water only in accordance with the terms and conditions of this license and only onto the existing spray-irrigation and snowmaking fields [SIEA, SIWA, SISA] and from those sources as indicated in the Waste Discharge License application accepted for processing on October 27, 2011. Discharge of waste water from any other location or from sources other than those indicated on said application requires formal modification of this license.

SPECIAL CONDITIONS

D. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain materials in concentrations or combinations which would impair the uses designated by the classification of the ground water.

2. The effluent must not lower the quality of any classified body of water (ground water is a classified body of water under *Standards for Classification of Ground Water*, 38 M.R.S.A., §465-C) below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

E. NOTIFICATION REQUIREMENT

In accordance with Standard Condition #6, the licensee shall notify the Department of the following:

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and,
2. 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 biological treatment through a properly designed, operated and maintained lagoon system prior to disposal via spray irrigation or snowmaking.

2. The spray-irrigation and snowmaking 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.

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

SPECIAL CONDITIONS

F. GENERAL OPERATIONAL CONSTRAINTS (cont'd)

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 #4 of this license. A *sanitary sewer overflow* (SSO) is the release of raw sewage from a sanitary collection system prior to reaching the treatment plant or facility. Spills out of manholes, into basements, onto municipal or private property, etc, and into the waters of the State are all considered to be SSOs.

5. The licensee shall maintain a file on the location of all system components and relevant features. 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. Each component shall be mapped and field located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department.

G. SPRAY IRRIGATION/SNOWMAKING OPERATIONAL CONSTRAINTS, LOGS AND REPORTS

1. Waste water (as liquid spray irrigation) 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. There shall be no significant runoff within or outside of the spray irrigation area due to the spray irrigation events. The licensee shall have and maintain a forestry management plan that includes provisions for maintaining the spray irrigation and snowmaking areas in optimum condition for the uptake of nutrients and moisture-holding capacity.

2. At least 10 inches of separation from the ground surface to the ground water table shall be present prior to spray irrigation. Monitoring Wells #5 and #7 may be used to monitor depth to groundwater elevation in the east and west spray irrigation areas. Inspection Well #SISA shall be used to monitor groundwater levels in the spray irrigation/snowmaking area (SISA).

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 on site to 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 as spray irrigation (liquid) where there is snow present on the surface of the ground or when there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.

SPECIAL CONDITIONS

G. SPRAY IRRIGATION/SNOMAKING OPERATIONAL CONSTRAINTS, LOGS AND REPORTS (cont'd)

5. No traffic or equipment shall be allowed in the spray-irrigation field area except where installation occurs or where normal operations and maintenance are performed (this shall include forest management operations).
6. **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.

7. The licensee shall maintain the equivalent of one ground water level inspection well per 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** of this license or other format as approved by the Department.

8. 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 start-up of the spray-irrigation system**, the licensee shall walk the spray-irrigation site ***or*** have other means to check the system for leakage in the piping system and determine if individual sprayheads and pump(s) are functioning as designed, and verify that application rates are appropriate for the existing site conditions. The procedures used to determine the system is functioning as designed shall be described in the facility's O&M manual. Should significant malfunctions or leaks be detected, the licensee must shut down the malfunctioning/leaking sections 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(s). The licensee shall field calibrate equipment to ensure proper and uniform spray applications when operating. Calibration involves collecting and measuring application rate at different locations within the application area. A description of the calibration procedures and a log sheet that have been used for recording calibration results shall be included as part of the Operations & Maintenance manual.

9. **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 or other format as approved by the Department.

   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 or other format as approved by the Department. The *Monthly Operations Log, Spray Application Report by Week, and Depth to Groundwater* for each month shall be submitted to the

SPECIAL CONDITIONS

G. SPRAY IRRIGATION/SNOMAKING OPERATIONAL CONSTRAINTS, LOGS AND REPORTS (cont'd)

Department as an attachment to the monthly Discharge Monitoring Reports (DMRs). Copies will also be maintained onsite for Department review upon request.

H. VEGETATION MANAGEMENT

1. The licensee shall remove grasses and other vegetation such as shrubs and trees if necessary so as not to impair the operation of the spray-irrigation/snowmaking systems, 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 spray irrigation sites shall be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray. The goal of the vegetative buffer zone maintenance is to maximize vegetation and forest canopy in order to minimize the potential for offsite drift or spray.

I. 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 banks. Any signs of leaks, destructive animal activity or soil erosion of the banks shall be repaired immediately.

2. The banks of the lagoons shall be maintained to keep them free of woody vegetation and other vegetation that may be detrimental to the integrity of the bank and/or lagoon liner. The waters within the lagoons shall be kept free of all vegetation (i.e. grasses, reeds, cattails, etc) that hinders the operation of the lagoon.

3. The licensee shall maintain freeboard of all 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.

4. 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.

SPECIAL CONDITIONS

J. INSPECTIONS AND MAINTENANCE

The licensee shall periodically 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, storage tanks, spray apparatus, and pipes. At a minimum, the logs shall include the unique identifier [alphabetic, numeric or alpha-numeric -see Special Condition F(5)], the date of maintenance, type of maintenance performed, names or person performing the maintenance, and other relevant system observations.

K. WET WEATHER FLOW MANAGEMENT PLAN

The licensee shall maintain a Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. The plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic tank wastes and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. **The licensee shall review the plan at least annually and record any necessary changes to keep the plan up-to-date. Any changes shall be submitted to the Department for review and approval.**

L. OPERATIONS AND MAINTENANCE (O & M) PLAN AND SITE PLAN(S)

The licensee 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. Of particular importance is the management of the spray application/snowmaking sites such that the sites are given ample periods of rest to prevent over application events as well as providing a substantially even application of effluent subject to freeze crystallization (snowfluent) over the snowmaking area. It is acknowledged that the licensee has limited control over the distribution of the snow made using the freeze crystallization process as winds and weather conditions may exceed the licensee's ability to completely evenly distribute the snowfluent over the snowmaking area.

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.

SPECIAL CONDITIONS

M. GROUNDWATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS

1. As an exhibit to be attached to the next re-licensing application anticipated to be submitted to the Department **on or before February 28, 2017** ***[PCS Code 24599],*** the licensee shall submit to the Department for review and approval, a report summarizing the previous five years of groundwater monitoring well results. The report shall be written in accordance with, "*Water Quality Monitoring Plan Details*", section 9 of as Attachment "1" of the Fact Sheet of this license. Note that annual reporting (as referenced in section 9 of the Plan Details) is suspended, except for the fifth and final year of this license. If contamination is detected in the future, this condition may be reinstated. The report summarizing the prior five years of operation shall be submitted to, and in a format approved by, the Department, electronically and with "hard copy."

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.

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.

N. DISPOSAL OF TRANSPORTED WASTES IN WASTE WATER TREATMENT FACILITY

During the effective period of this permit, the licensee is authorized to receive and introduce to the treatment process or solids handling stream up to **a maximum of 5,000 gallons per day, year-round, and a monthly maximum of 43,150 gallons** of transported wastes from local haulers, subject to the following terms and conditions:

1. **In the case of the licensee, "transported wastes" shall mean "septage" (septic tank wastes) only.** Septage shall mean any waste, refuse, effluent, sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added.

2. The character and handling of all septic tank wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

3. At no time shall the addition of septic tank wastes cause or contribute to effluent quality violations. Septic tank wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must

SPECIAL CONDITIONS

N. DISPOSAL OF TRANSPORTED WASTES IN WASTE WATER TREATMENT FACILITY (cont'd)

be refused. Odors and traffic from the handling of septic tank wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of septic tank wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

4. The licensee shall maintain records for each load of septic tank wastes in a daily log which shall include at a minimum the following:

   (a) The date;

   (b) The volume of septic tank wastes received;

   (c) The source of the septic tank wastes;

   (d) The person transporting the septic tank wastes;

   (e) The results of inspections or testing conducted;

   (f) The volumes of septic tank wastes added to each treatment stream; and

   (g) The information in (a) through (d) for any septic tank wastes refused for acceptance.

   These records shall be maintained at the treatment facility for a minimum of five years.

5. The addition of septic tank wastes into the treatment process or solids handling stream shall not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of septic tank wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.

6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as septic tank wastes but should be reported in the treatment facility's influent flow.

7. During wet weather events, septic tank wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department pursuant to Special Condition K that provides for full treatment of septic tank wastes without adverse impacts.

8. In consultation with the Department, chemical analysis is required prior to receiving septic tank wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.

SPECIAL CONDITIONS

N. DISPOSAL OF TRANSPORTED WASTES IN WASTE WATER TREATMENT FACILITY (cont'd)

9. Access to septic tank waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

10. The authorization in this Special Condition is subject to annual review and, with notice to the licensee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 CMR 555 and the terms and conditions of this permit.

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 sites that inform the general public that the area is being used to dispose of sanitary 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. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period**. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Maine Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

Alternatively, if submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period.

SPECIAL CONDITIONS

P. MONITORING AND REPORTING

Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13^{th}) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15^{th}) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15^{th} day of the month following the completed reporting period.

Q. REOPENING OF LICENSE FOR 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.

R. 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.

License Attachments A-C

Monthly Operations Log **Attachment A** **(Month/Year) _____)**

WDL # W002781-6B-H-R; Fields #_____Weekly Application Rate: _____ gallons/acre (_____ inches)

	A	B	C	D	E	F	G	H	I	J	K
Day	DATE	PRECIP Inches	TEMP	WEATHER	WIND- Direction Speed	Soil Moisture	Quantity- Total Gallons Pumped	Name of Field(s) Used	Acres Sprayed (Sum of Col H x Area of Each Field)	Gallons/Acre (inches) (Col G divided by I)	Total Inches
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	10										
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	24										
	25										
	26										
	27										
	28										
	29										
	30										
	31										

Monthly Total =						

Spray Application Report by Week Attachment B Facility Name:

WDL # W002781-6B-H-R; (Month _____, Year _____) Weekly Application Rate _____ gal/acre_____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 if 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: Carrabassett Valley Sanitary District; WDL # W002781-6B-H-R;

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 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

January 10, 2012

COMPLIANCE TRACKING NUMBER: **MEU502781**

LICENSE NUMBER: **W002781-6B-H-R**

NAME AND ADDRESS OF APPLICANT:

CARRABASSETT VALLEY SANITARY DISTRICT
Village West #35
Carrabassett Valley, Maine 04947

COUNTY: **Franklin**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Carrabassett Valley Sanitary District
4064 Carrabassett Drive
Carrabassett Valley, Maine 04947

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

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. David Keith, Superintendent**

(207) 237-3642
dskeith@tds.net

1. APPLICATION SUMMARY

The Carrabassett Valley Sanitary District ("licensee") has applied to the Department for renewal of Waste Discharge License (WDL) # W002781-5L-F-R that was issued on December 22, 2006 and expired on December 22, 2011. The licensee operates surface waste water disposal systems that discharge up to 100,000 gallons per acre per week of treated sanitary waste water during the spring, summer and fall seasons (April 15 – November 15) onto a 43-acre spray area and up to 54 million gallons of freeze-crystallized waste water (snowmaking) and/or treated sanitary waste water during the winter onto a 32-acre snowmaking area. A site location map is included as **Attachment A** of this Fact Sheet.

2. LICENSE MODIFICATION REQUESTED

The licensee is requesting an increase in the volume of septic tank wastes received from 120,000 gallons per year, 25,000 gallons per month (September – November) and 5,000 gallons per month (December – August) to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, in order to better serve its customers.

3. LICENSE MODIFICATION GRANTED

The Department is granting the licensee an increase in the volume of septic tank wastes received to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, based on the licensee's compliance history and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555 (last amended March 9, 2009).

4. LICENSE SUMMARY

a. Terms & Conditions: This licensing action is carrying forward all the terms and conditions with the following exceptions. This licensing action is different in that it is:

1. Modifying groundwater monitoring measurements from the nearest one-hundredth ($1/100^{th}$) of a foot to the nearest one-tenth ($1/10^{th}$) of a foot in order to maintain consistency with similar licenses.

2. Modifying the Treatment Plant Operator Certification requirement to include an SITS-II certificate or higher.

3. Increasing the allowable volume of septic tank wastes received to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons, based on the licensee's compliance history and 06-096 CMR 535.

4. Modifying the requirement to maintain lagoon freeboard levels at a minimum of three (3) feet or at design level, whichever is greater, to two (2) feet or at design level, whichever is greater, in order to maintain consistency with similar licenses.

5. Eliminating the requirement for the licensee to submit a Water Quality Monitoring Plan in order to maintain consistency with similar licenses.

6. Eliminating the requirement for the licensee to submit a Spray Irrigation Performance Report in order to maintain consistency with similar licenses.

4. LICENSE SUMMARY (cont'd)

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

July 29, 1993 – The Department of Environmental Protection (DEP) authorized the discharge of treated sanitary waste water via spray irrigation with the issuance of WDL #W002781-67-B-R.

September 23, 1994 –DEP issued WDL #W002781-59-C-A which authorized the use of freeze nucleation (snowmaking) as a waste water disposal method during the winter months.

May 17, 2000 – DEP issued WDL #W002781-5L-D-R which modified the 1994 WDL to increase the BOD and TSS concentration limits from the lagoon prior to spray irrigation as well as increased the spray irrigation application rate from 2.0 to 3.7 inches per week per acre. The May 17, 2000 WDL expired on May 17, 2005.

July 18, 2003 – DEP issued WDL #W002781-5L-E-M that authorized the CVSD to receive and treat up to 4,000 gallons of septage per month from local septic haulers servicing entities within the Town of Carrabassett Valley. The July 18, 2003 WDL expired on May 17, 2005 concurrently with WDL #W002781-5L-D-R.

December 22, 2006 – The Department issued WDL #W002781-5L-F-R for a five-year term.

June 17, 2008 – The Department issued an Administrative Modification of WDL #W002781-5L-F-R to correct typographical errors and to identify Monitoring Well #SISA as a groundwater level inspection well instead of as a groundwater monitoring well.

June 12, 2009 – The Department issued a Minor Revision of WDL #W002781-5L-F-R, authorizing the licensee to receive and treat up to 120,000 gallons per year and 25,000 gallons per month (September – November) of transported wastes. The Minor Revision was assigned WDL #W002781-5L-G-M.

October 25, 2011 – The licensee submitted a timely application for renewal of WDL #W002781-5L-F-R. The application was accepted as complete on October 27, 2011 and was assigned WDL #W002781-6B-H-R.

c. Source Description: The licensee treats waste water from 6,000 sanitary and commercial customers in the Sugarloaf Mountain Ski Area and associated facilities, condominium units and other residential and commercial entities within the Carrabassett Valley Sanitary District's boundaries. The treated waste water is disposed of via slow rate irrigation and a solid set freeze crystallization process (snowmaking). The licensee is

4. LICENSE SUMMARY (cont'd)

authorized to receive and introduce transported wastes into the treatment process or solids handling stream up to a maximum of 5,000 gallons per day and 25,000 gallons per month from September through November. The licensee is authorized to receive and introduce transported wastes (septage only) into the treatment process or solids handling stream up to a maximum of 5,000 gallons per day and up to 5,000 gallons per month from December through August. This licensing action is increasing the volume of septage received to up to 5,000 gallons per day, year-round, with a monthly maximum total of 43,150 gallons per month based on the licensee's compliance history and 06-095 CMR 555.

d. Waste Water Treatment: Slow rate land irrigation and snowmaking are environmentally sound and appropriate technologies for best practicable treatment and disposal of sanitary waste water. The soil and vegetation within the spray irrigation and snowmaking areas will provide adequate filtration and adsorption of waste water to preserve the integrity of the soil and both surface and ground water resources in the area.

Snowmaking is appropriate technology for the ski area which generates the greatest volume of sanitary waste water during the months when snow can be generated. The existing surface waste water disposal system consists of a twelve mile-long gravity/pressure waste water collection system, one aerated, three primary storage and three backup storage lagoons, a slow rate sprinkler spray irrigation system, twenty-three (23) stationary snowmaking towers and ancillary equipment.

Waste water is pumped from the collection system to the first of four elevated, clay-lined treatment lagoons. The first lagoon is aerated via mixers and diffusers. The waste water is pumped from the first lagoon to the three primary storage lagoons which are set up in series. Each lagoon is designed to hold a capacity of 5.2 million gallons of waste water. There are three additional storage lagoons, each with a capacity of 5.8 million gallons.

Effluent from Lagoon #4 is pumped to two spray irrigation fields (April through November) totaling 43 acres, or to a 32-acre snow/spray irrigation field. The effluent applied to the snow/spray irrigation field is either freeze-crystallized ("snowfluent") prior to application or applied in liquid form. The 43-acre parcel has two distinct spray areas designated as the "East Spray Area" consisting of 23 acres with 25 laterals having a total of 67 spray nozzles, and the "West Spray Area" that consists of 20 acres with 18 laterals having a total of 90 spray nozzles. Both spray areas are heavily wooded with a mature stand of predominately mixed softwoods. The snowfluent deposit area has no trees, has a ground cover of mixed grasses and includes eleven fixed towers that distribute the snowfluent over the 32-acre site. The area down slope of the spray irrigation area and snowfluent deposit areas are forest lands and have a moderate easterly slope. Stratton Brook, a tributary to Flagstaff Lake, is approximately one mile down slope from the project.

4. LICENSE SUMMARY (cont'd)

Both the spray irrigation and snowmaking areas contain predominately Marlow and Peru soil types which are moderately well drained or well drained. In the snowfluent deposit area, it is anticipated that up to 40% of the waste water deposited there will be sublimated or evaporated which reduces the volume of melt water from 54 MG to approximately 32 MG. The 32 MG volume of meltwater has, in the past, been adequately adsorbed by the soil during the melting period following the snowmaking season. It is noted that the snowfluent made during the winter season is to be applied over the entire 32 acre area in order to ensure a substantially even distribution of the material and to provide an insulation layer for meltwater runoff to infiltrate into the ground during the winter conditions.

The septage receiving station is located approximately 3 miles upstream of the waste water treatment facility. The station consists of a sidestream storage tank with a barscreen and a manually controlled flow regulating valve, both of which are secured within a locked structure. The wastes are metered into the wastewater stream, allowing for complete mixing prior to entering the main sewage pumping station. The flow then travels though a grinder prior to being pumped 1.5 miles to the waste water treatment facility.

Since the last license application was filed, the licensee performed the following significant modifications: Redesigned and retrofitted the snowmaking system to more evenly distribute snowfluent across the site; retrofitted the east and west irrigation sites by replacing aluminum irrigation pipe with HPDE; reconfigured the irrigation heads in the east field for optimal distribution; replaced the lagoon aeration manifold to improve efficiency and reduce downtime due to failure; completed rehabilitation of the main sewage pumping station by replacing all pumps and ancillary equipment; replaced the sewage pumping station emergency generator and transfer switch; replaced the main power leads from public power to the sewage pumping station; constructed a septic tank wastes receiving facility located within the collection system to allow dilution and conditioning of the wastes prior to the treatment facility; performed collection system rehabilitation resulting in a 50% reduction of inflow and infiltration. The licensee described current and future modifications or improvements as follows: Completion of the retrofit of the east irrigation field with the addition of sprinkler heads in under utilized areas (Spring 2011); reconfiguration of sprinkler heads in the west irrigation field to achieve more optimal distribution (Summer 2011); continued sewage collection system rehabilitation or sewer line replacement as required, based upon the findings of the District's ongoing Inflow and Infiltration Removal Plan.

5. CONDITIONS OF THE LICENSE

Conditions of Licenses, 38 M.R.S.A. §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 Water Classification System.

6. RECEIVING WATER QUALITY STANDARDS

Classification of Groundwater, 38 M.R.S.A § 470, indicates the groundwater at the point of discharge is classified as Class GW-A receiving waters. *Standards of Classification of Groundwater*, 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.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effluent and Groundwater Monitoring

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 surface and groundwater quality in the area.

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. The licensee shall periodically monitor the lagoon effluent, spray irrigation fields and groundwater monitoring locations onsite at the specified frequencies and locations as called for in Special Condition A of this license.

a. *Biochemical Oxygen Demand & Total Suspended Solids (BOD5 & TSS)* –BOD5 is the rate at which organisms use the oxygen in waste water while stabilizing decomposable organic matter under aerobic conditions. BOD5 measurements indicate the organic strength of wastes in water. TSS consists of both settleable and non-settleable solid materials contained in the waste water. Monitoring for

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

these parameters yields an indication of the effectiveness of the lagoon treatment process and the condition of the waste water being applied.

b. *pH* – The daily maximum pH limit of 6.0 – 9.0 standard units is a best practicable treatment standard incorporated into similar waste discharge licenses issued by the Department. 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 groundwater contamination.

c. *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 groundwater or surface water contamination.

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

e. *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 groundwater contamination.

f. *Application Rates (Weekly)* – The weekly maximum rate of 100,000 gallons per acre is being carried forward from the previous licensing action. The weekly limit is based on the characteristics of in-situ soils and provides protection against hydraulically overloading and preventing runoff from the spray-irrigation area.

g. *Nitrate-nitrogen* – Nitrogen assumes different forms depending upon the oxidation-reduction conditions in the soil and groundwater. 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 in groundwater as well as nitrate-nitrogen in the lagoon effluent are important in determining the effectiveness of the treatment process. The monitoring well sampling for this parameter 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.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

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.

h. Groundwater Monitoring Wells

This licensing action is carrying forward the monitoring requirement for ten of the eleven monitoring wells. In their October 19, 2011 *Groundwater Quality Assessment Report* for the licensee, S.W. Cole noted the following: With the exception of pH, the concentrations of all tested parameters measured from the groundwater monitoring wells were below the Maine Centers for Disease Control's Maximum Exposure Guidelines (MEGs) and Maximum Contaminant Levels (MCLs); pH readings for all wells showed at least one result below the range of 6.5 – 8.5 SU; two specific conductance concentrations over 275 umhos/cm (the level at which the licensee is to immediately report the result to the Department) were recorded for Monitoring Well #6; a nitrate-nitrogen concentration of 7.1 mg/L (70% of the MCL and MEG of 10 mg/L) was recorded at Monitoring Well #11 in May 2011. The S.W. Cole report erred when listing a nitrate-nitrogen result of 7.4 mg/L at Monitoring Well #3; the highest result recorded for that location over the past 5 years, as confirmed by the licensee, was 3.9 mg/L. The report concluded that the nitrate-nitrogen concentrations at MW11 should be closely watched, and suggested overland flow from the snowfluent area towards MW11, and a poor bentonite well seal at the surface, could explain some of the elevated readings there. With regard to the specific conductance readings at MW6, S.W. Cole stated that the elevated readings appeared to have been documented historically (pre-2005 and during the previous license renewal) and are not increasing, therefore, continued monitoring and notifications to the Department of readings above 275 umhos/cm are recommended. With regard to pH, S.W. Cole noted a slightly upward trend in average pH concentrations (7.6 SU) and recommended continued observation of the slight upward trend to assess if pH values will level off or start to become more basic.

Eleven groundwater monitoring wells are shown on **Attachment A** of this Fact Sheet. The eleven wells are identified below: MW1, MW2, MW3, MW5, MW6, MW7, MW8, MW9, MW10, and MW11. ***MW4 is no longer required to be monitored as background conditions may be determined from data obtained in MW1**:

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Well Designation	Location
MW1	Background well, upgradient from all other activities
MW2	Downgradient, and northeasterly from the spray field
MW3	Downgradient, and northerly from the center of the spray field
MW4*	Southwesterly of lagoon #4
MW5	Within the easterly spray field
MW6	Westerly of lagoon #7
MW7	Between lagoons #7 and #2
MW8	Downgradient northeasterly portion of the snowmaking area
MW9	Downgradient northwesterly portion of the snowmaking area
MW10	Background well, upgradient/southwesterly of snowmaking area
MW11	Downgradient, north-central portion of snowmaking area

Summaries of groundwater monitoring well results for the period 1/01/07 – 9/01/11 are as follow:

Depth to Water Level Below Landsurface

Monitoring Well	Limit (Feet)	Range (Feet)	Average (Feet)	Number of DMRs	Compliance Status
MW1	Report	1 – 5	2	9	N/A
MW2	Report	2 – 6	3	9	N/A
MW3	Report	2 – 6	3	9	N/A
MW5	Report	1 – 5	3	8	N/A
MW6	Report	2 – 6	3	9	N/A
MW7	Report	2 – 5	3	8	N/A
MW8	Report	1 – 4	2	9	N/A
MW9	Report	1 – 6	4	9	N/A
MW10	Report	3 – 7	5	9	N/A
MW11	Report	1 – 4	2	9	N/A

This licensing action is carrying forward the monitoring requirements for depth to water level below landsurface from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Nitrate-Nitrogen

Monitoring Well	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance Status
MW1	10 mg/L	0 – 1	1	9	100%
MW2	10 mg/L	1 – 2	2	9	100%
MW3	10 mg/L	1 – 4	3	9	100%
MW5	10 mg/L	2 – 4	3	9	100%
MW6	10 mg/L	0 – 2	1	9	100%
MW7	10 mg/L	1 – 4	2	9	100%
MW8	10 mg/L	0 – 3	1	9	100%
MW9	10 mg/L	1 – 4	2	9	100%
MW10	10 mg/L	1 – 2	1	9	100%
MW11	10 mg/L	0 – 7	2	9	100%

Results reported as "less than" (<) were considered present at the detection limit for calculation purposes. This licensing action is carrying forward the monitoring requirements for nitrate-nitrogen from the previous licensing action.

Specific Conductance

Monitoring Well	Limit (umhos/cm)	Range (umhos/cm)	Average (umhos/cm)	Number of DMRs	Compliance Status
MW1	Report	50 – 100	72	9	N/A
MW2	Report	160 – 170	156	9	N/A
MW3	Report	100 – 160	139	9	N/A
MW5	Report	140 – 180	161	9	N/A
MW6	Report	130 – 280	240	9	N/A
MW7	Report	50 – 100	77	9	N/A
MW8	Report	80 – 210	119	9	N/A
MW9	Report	70 – 130	99	9	N/A
MW10	Report	40 – 80	56	9	N/A
MW11	Report	60 – 140	96	9	N/A

This licensing action is carrying forward the monitoring requirements for specific conductance from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Temperature

Monitoring Well	Limit (Deg C)	Range (Deg C)	Average (Deg C)	Number of DMRs	Compliance Status
MW1	Report	7 – 12	9	9	N/A
MW2	Report	8 – 12	10	9	N/A
MW3	Report	4 – 12	9	9	N/A
MW5	Report	8 – 13	10	9	N/A
MW6	Report	7 – 13	9	9	N/A
MW7	Report	7 – 13	9	9	N/A
MW8	Report	6 – 12	10	9	N/A
MW9	Report	5 – 13	10	9	N/A
MW10	Report	4 – 14	9	9	N/A
MW11	Report	6 – 12	10	9	N/A

This licensing action is carrying forward the monitoring requirements for temperature from the previous licensing action.

pH

Monitoring Well	Limit (S.U.)	Range (S.U.)	Average (S.U.)	Number of DMRs	Compliance Status
MW1	Report	5.8 – 8.1	6.8	9	N/A
MW2	Report	6.4 – 8.3	7.4	9	N/A
MW3	Report	6.2 – 7.8	6.9	9	N/A
MW5	Report	5.5 – 7.4	6.6	9	N/A
MW6	Report	5.8 – 7.2	6.6	9	N/A
MW7	Report	4.9 – 7.3	6.2	9	N/A
MW8	Report	6.0 – 7.2	6.6	9	N/A
MW9	Report	5.8 – 7.8	6.7	9	N/A
MW10	Report	5.5 – 7.5	6.5	9	N/A
MW11	Report	5.0 – 7.6	6.3	9	N/A

This licensing action is carrying forward the monitoring requirements for pH from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Total Suspended Solids

Monitoring Well	Limit (mg/L)	Range (mg/L)	Average (mg/L)	Number of DMRs	Compliance Status
MW1	Report	8 – 30	18	9	N/A
MW2	Report	4 – 36	13	9	N/A
MW3	Report	2 – 37	10	9	N/A
MW5	Report	4 – 71	14	9	N/A
MW6	Report	4 – 156	56	9	N/A
MW7	Report	4 – 276	50	9	N/A
MW8	Report	4 – 193	42	9	N/A
MW9	Report	4 – 303	47	9	N/A
MW10	Report	2 – 449	67	9	N/A
MW11	Report	2 – 56	15	9	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the TSS monitoring requirements from the previous licensing action.

Total Arsenic

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	3	3	1	N/A
MW2	Report	<1	1	1	N/A
MW3	Report	<1	1	1	N/A
MW5	Report	<1	1	1	N/A
MW6	Report	2	2	1	N/A
MW7	Report	<1	1	1	N/A
MW8	Report	2	2	1	N/A
MW9	Report	<1	1	1	N/A
MW10	Report	<1	1	1	N/A
MW11	Report	<1	1	1	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Total Cadmium

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	<0.005	0.005	1	N/A
MW2	Report	<0.005	0.005	1	N/A
MW3	Report	<0.005	0.005	1	N/A
MW5	Report	<0.005	0.005	1	N/A
MW6	Report	<0.005	0.005	1	N/A
MW7	Report	<0.005	0.005	1	N/A
MW8	Report	<0.005	0.005	1	N/A
MW9	Report	<0.005	0.005	1	N/A
MW10	Report	<0.005	0.005	1	N/A
MW11	Report	<0.005	0.005	1	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

Total Chromium

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	0.003	0.003	1	N/A
MW2	Report	0	0	1	N/A
MW3	Report	0	0	1	N/A
MW5	Report	0	0	1	N/A
MW6	Report	0	0	1	N/A
MW7	Report	0	0	1	N/A
MW8	Report	0	0	1	N/A
MW9	Report	0	0	1	N/A
MW10	Report	0	0	1	N/A
MW11	Report	0	0	1	N/A

This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Total Copper

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	0.008	0.008	1	N/A
MW2	Report	0.002	0.002	1	N/A
MW3	Report	0.003	0.003	1	N/A
MW5	Report	0.004	0.004	1	N/A
MW6	Report	0.003	0.003	1	N/A
MW7	Report	0.002	0.002	1	N/A
MW8	Report	0.002	0.002	1	N/A
MW9	Report	0.006	0.006	1	N/A
MW10	Report	0.002	0.002	1	N/A
MW11	Report	0.001	0.001	1	N/A

This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

Total Lead

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	0.002	0.002	1	N/A
MW2	Report	0	0	1	N/A
MW3	Report	0	0	1	N/A
MW5	Report	0	0	1	N/A
MW6	Report	0.002	0.002	1	N/A
MW7	Report	0.001	0.001	1	N/A
MW8	Report	0.003	0.003	1	N/A
MW9	Report	0.002	0.002	1	N/A
MW10	Report	0	0	1	N/A
MW11	Report	0.003	0.003	1	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Total Mercury

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	0	0	1	N/A
MW2	Report	0	0	1	N/A
MW3	Report	0	0	1	N/A
MW5	Report	0	0	1	N/A
MW6	Report	0	0	1	N/A
MW7	Report	0	0	1	N/A
MW8	Report	0	0	1	N/A
MW9	Report	0	0	1	N/A
MW10	Report	0	0	1	N/A
MW11	Report	0	0	1	N/A

This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

Total Nickel

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	0.004	0.004	1	N/A
MW2	Report	0	0	1	N/A
MW3	Report	0	0	1	N/A
MW5	Report	0.003	0.003	1	N/A
MW6	Report	0	0	1	N/A
MW7	Report	0	0	1	N/A
MW8	Report	0	0	1	N/A
MW9	Report	0	0	1	N/A
MW10	Report	0	0	1	N/A
MW11	Report	0	0	1	N/A

This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

h. Groundwater Monitoring Wells

Total Zinc

Monitoring Well	Limit (ug/L)	Range (ug/L)	Average (ug/L)	Number of DMRs	Compliance Status
MW1	Report	66	66	1	N/A
MW2	Report	<25	25	1	N/A
MW3	Report	44	44	1	N/A
MW5	Report	110	110	1	N/A
MW6	Report	332	332	1	N/A
MW7	Report	36	36	1	N/A
MW8	Report	44	44	1	N/A
MW9	Report	51	51	1	N/A
MW10	Report	69	69	1	N/A
MW11	Report	29	29	1	N/A

This licensing action is carrying forward the metals monitoring requirements from the previous licensing action. Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

Summaries of lagoon effluent results for the period 1/01/07 – 9/01/11 are as follow:

i. Lagoon Effluent

Lagoon Influent Flow

Value	Limit	Range	Mean	Number of DMRs	Compliance
Weekly Maximum	Report, gal/week	344,800 – 3,622,000	1,077,709	49	N/A
Daily Maximum	Report, gal/day	72,400 – 3,410,000	497,738	49	N/A

This licensing action is carrying forward the flow monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

i. Lagoon Effluent

Lagoon Level, Freeboard

Value	Limit (feet)	Range (feet)	Mean (feet)	Number of DMRs	Compliance
Daily Maximum	Report	0 – 11	3	32	N/A

This licensing action is carrying forward the freeboard monitoring requirement from the previous licensing action.

BOD5

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	Number of DMRs	Compliance
Daily Maximum	100	2 – 51	13	16	100%

This licensing action is carrying forward the BOD5 monitoring requirement from the previous licensing action.

Total Suspended Solids

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	Number of DMRs	Compliance
Daily Maximum	100	4 – 41	16	16	100%

This licensing action is carrying forward the TSS monitoring requirement from the previous licensing action.

Nitrate-nitrogen

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)	Number of DMRs	Compliance
Daily Maximum	Report	<1 – 1	0.8	16	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the nitrate-nitrogen monitoring requirement from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

i. Lagoon Effluent

Specific Conductance

Value	Limit (umhos/cm)	Range (umhos/cm)	Mean (umhos/cm)	Number of DMRs	Compliance
Daily Maximum	Report	90 – 390	273	16	N/A

This licensing action is carrying forward the specific conductance monitoring requirement from the previous licensing action.

Temperature

Value	Limit (Deg C)	Range (Deg C)	Mean (Deg C)	Number of DMRs	Compliance
Daily Maximum	Report	7 – 19	13	16	N/A

This licensing action is carrying forward the temperature monitoring requirement from the previous licensing action.

Total Metals

Parameter	Limit (ug/L)	Range (ug/L)	Mean (ug/L)	Number of DMRs	Compliance
Arsenic	Report	<1	1	1	N/A
Cadmium	Report	<0.0005	0.0005	1	N/A
Chromium	Report	0	0	1	N/A
Copper	Report	0.018	0.018	1	N/A
Lead	Report	0	0	1	N/A
Mercury	Report	0	0	1	N/A
Nickel	Report	0.002	0.002	1	N/A
Zinc	Report	139	139	1	N/A

Results reported as "less than" (<) were considered present for calculation purposes. This licensing action is carrying forward the metals monitoring requirements from the previous licensing action.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

j. Spray-irrigation Areas

Summaries of the spray-irrigation area monitoring results for the period 6/16/06 – 6/16/11 are as follow:

Application Rate

Spray Area	Weekly Max gal/acre	Range (gal/acre)	Average (gal/acre)	Number of DMRs	Compliance Status
SIEA	100,000	0 – 100,581	85,693	29	97%
SIWA	100,000	0 – 100,568	89,336	29	97%
SISA	100,000	0 – 100,000	10,243	21	100%

This licensing action is carrying forward the spray-irrigation application rate reporting requirements from the previous licensing action.

Flow

Spray Area	Monthly Total (total gallons)	Range (Mgal/mo.)	Average (Mgal/mo.)	Number of DMRs	Compliance Status
SIEA	Report	0 – 4	2	29	N/A
SIWA	Report	0 – 5	3	29	N/A
SISA	Report	9 – 19	38	11	N/A

This licensing action is carrying forward the spray-irrigation flow reporting requirements from the previous licensing action.

k. Transported Wastes: The licensee has a side stream treatment and storage facility for transported wastes. Therefore, according to *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 CMR 555, the Department could authorize the licensee to accept and treat up to 1% of their design capacity of 105 million gallons per year, or 1.05 million gallons of transported wastes per year. NOTE: In the case of the licensee, "transported wastes" means septic tank wastes only.

On June 12, 2009, the Department issued a minor license revision granting the licensee approval to receive and treat up to 120,000 gallons per year (up to 25,000 gallons per month and up to 5,000 gallons per day) of transported wastes from September – November. The minor license revision granted the licensee approval to receive and treat up to 5,000 gallons per day and up to 5,000 gallons per month of transported wastes from July through December. These seasonal limitations were approved as the licensee indicated the bulk of transported wastes received began in late summer and lasted through autumn as seasonal home and camp owners arrived to prepare their property for the ski season.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

In order to better serve its customers, the licensee is requesting the Department modify the license to allow for the addition of transported wastes (septic tank wastes) at a rate of 5,000 gallons per day and up to a monthly maximum total of 43,150 gallons on a year-round basis.

The requested modification would increase the annual volume of septic tank wastes received from 120,000 gallons per year to 517,800 gallons per year which is 50% of what could be authorized by 06-096 CMR 555. This licensing action is granting the licensee's request to allow for the addition of septic tank wastes at a rate of up to 5,000 gallons per day and up to a monthly maximum total of 43,150 gallons on a year-round basis based on the licensee's compliance history and the standards in 06-096 CMR 555.

8. 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. It is recommended that a field calibration report be submitted to the Department Compliance Inspector shortly after relicensing and annually thereafter, or whenever operating conditions are changed from assumed design parameters.

9. 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.

10. PUBLIC COMMENTS

Public notice of this application was made in *The Irregular* newspaper on or about May 5, 2011. 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 licenses shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

11. DEPARTMENT CONTACTS

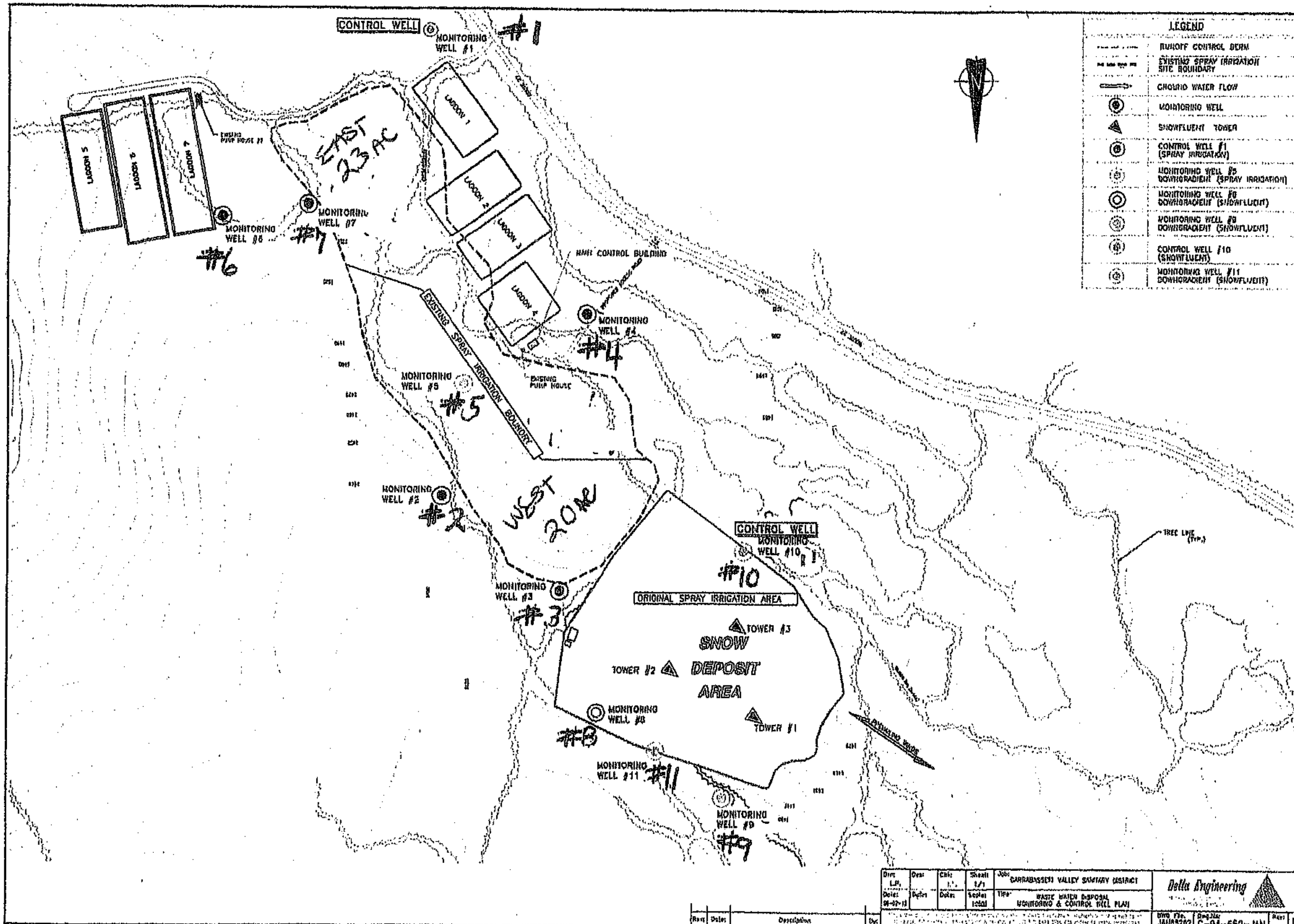
Additional information concerning this licensing action may be obtained from and written comments should be sent to:

Phyllis Arnold Rand
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Tel: (207) 287-7658 Fax: (207) 287-3435
e-mail: phyllis.a.rand@maine.gov

12. RESPONSE TO COMMENTS

During the period of December 8, 2011 through the issuance date of the license, the Department solicited comments on the proposed draft license to be issued for the discharge(s) from the licensee. The Department did not receive comments from the licensee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the license. Therefore, the Department has not prepared a Response to Comment.

ATTACHMENT A



LEGEND
RUNOFF CONTROL BERM
EXISTING SPRAY IRRIGATION SITE BOUNDARY
GROUND WATER FLOW
MONITORING WELL
SNOWFLUENT TOWER
CONTROL WELL #1 (SPRAY IRRIGATION)
MONITORING WELL #5 DOWNGRADIENT (SPRAY IRRIGATION)
MONITORING WELL #8 DOWNGRADIENT (SNOWFLUENT)
MONITORING WELL #9 DOWNGRADIENT (SNOWFLUENT)
CONTROL WELL #10 (SNOWFLUENT)
MONITORING WELL #11 DOWNGRADIENT (SNOWFLUENT)
CONTROL WELL
MONITORING WELL #1
#1
LAGOON 1
LAGOON 2
LAGOON 3
LAGOON 4
LAGOON 5
EAST 23 AC
MONITORING WELL #6
#6
MONITORING WELL #7
#7
WWT CONTROL BUILDING
MONITORING WELL #4
#4
EXISTING SPRAY IRRIGATION BOUNDARY
EXISTING PUMP HOUSE
MONITORING WELL #5
#5
MONITORING WELL #2
#2
WEST 20 AC
MONITORING WELL #3
#3
CONTROL WELL
MONITORING WELL #10
#10
ORIGINAL SPRAY IRRIGATION AREA
TOWER #3
TOWER #2
TOWER #1
SNOW DEPOSIT AREA
MONITORING WELL #8
#8
MONITORING WELL #11
#11
MONITORING WELL #9
#9
TREE LINE (TYP.)
CARRABASSETT VALLEY SANITARY DISTRICT
WASTE WATER DISPOSAL MONITORING & CONTROL WELL PLAN
Della Engineering
JAN05202
C-94-652-JAN
D

STANDARD CONDITIONS OF POTW WASTE DISCHARGE LICENSES
REVISED 7/16/96

1. General Conditions

A. All discharges shall be consistent with the terms and conditions of this license; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this license; it shall be a violation of the terms and conditions of this license to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this license.

B. The licensee shall permit the Department of Environmental Protection Staff upon the presentation of proper credentials:

(1) To enter upon licensee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this license;

(2) To have access to and copy any records required to be kept under the terms and conditions of this license;

(3) To inspect any monitoring equipment or monitoring method required in this license; or,

(4) To measure and/or sample at any intake, process or cooling effluent stream, waste water treatment facility and/or outfall.

C. This license shall be subject to such monitoring requirements as may be reasonably required by the Department of Environmental Protection including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The licensee shall provide the Department of Environmental Protection with periodic reports on the proper Department of Environmental Protection reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

D. This license does not preclude obtaining other required Federal, State or Municipal permits and does not authorize or approve the construction of any on-shore physical structures or facilities or the undertaking of any work in any navigable waters.

E. The issuance of this license does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of Federal, State or local laws or regulations.

F. Nothing in this license shall be construed to relieve the licensee from civil or criminal penalties for non-compliance, whether or not such non-compliance is due to factors beyond the licensee's control, such as accident, equipment breakdown, labor disputes or natural disaster.

2. Pretreatment Requirements

A. The licensee shall comply with all Federal Statutes, regulations, and conditions of permits applicable to its discharge of waste waters, including, but not limited to, those requiring the installation of pretreatment facilities or establishment of pretreatment programs.

B. Municipal or quasi-municipal licenses shall maintain user contracts, permits or ordinances to regulate industrial entities which discharge process waste water to the licensee's treatment facilities in quantities greater than 10% of the facility's design capacity. Such contracts, permits or ordinances shall be submitted to the Department for approval within three months of the effective date of this license or prior to acceptance of new or increased volumes of industrial waste water. All such contracts, permits or ordinances shall be an enforceable part of this license whether or not approved by the Department.

3. Waste water Treatment and Sampling Facilities

A. The licensee shall collect all waste flows designated by the Department of Environmental Protection as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

B. 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.

C. All necessary waste treatment facilities will be installed and operational prior to the discharge of any waste waters.

D. Final plans and specifications must be submitted to the Department of Environmental Protection and approved prior to the construction or modification of any treatment facilities.

E. The licensee shall install flow measuring facilities of a design approved by the Department of Environmental Protection.

F. The licensee must provide an outfall of a design approved by the Department of Environmental Protection which is placed in the receiving waters in such a manner that maximize mixing and dispersion of the waste waters will be achieved as rapidly as possible.

4. Non-Compliance Notification

A. In the event the licensee bypasses collection or treatment facilities or is unable to comply with any of the conditions of this license due, among other reasons, to:

(1) breakdown of waste treatment equipment;

(2) accidents caused by error or negligence;

(3) high strength, high volume or incompatible wastes; or

(4) other causes such as acts of nature,

the licensee shall notify the Department of Environmental Protection verbally as soon as its agents have knowledge of the incident.

B. Within five (5) days of becoming aware of such condition the licensee shall provide the Department of Environmental Protection in writing, the following information:

(1) A description of the discharge and cause of non-compliance; and

(2) The period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

C. If the licensee knows in advance of changes in licensed facilities or activities which may result in non-compliance or of the need to bypass, it shall submit prior notice at least ten days in advance of such occurrence.

D. In the event a bypass is due to inflow or infiltration of uncontaminated water into a sewer system, reporting requirements may be adjusted by the Department to a monthly basis.

5. Monitoring and Reporting

A. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the licensee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

B. Test Methods

The sampling, preservation, handling, and analytical methods used must conform with Standard Methods for the Examination of Water and Waste Waters, American Public Health Association, 1015 18th Street, N.W., Washington, D.C. 20036, latest approved edition, or methods referenced in 40 CFR Part 136, Guidelines Establishing Test Procedures for Analysis of Pollutants. However, different but equivalent methods are allowable if they receive the prior written approval from the Department of Environmental Protection.

(1) All reports shall be submitted to the Department not later than the fifteenth of the month following the end of the monitoring period.

(2) Any reports or records of monitoring activities and results shall include for all samples: (a) the date, exact place, and time of sampling; (b) the dates and times of analyses; (c) the analytical techniques/methods used, including sampling, handling, and preservation techniques; and (d) the results of all required analyses.

C. All reports shall be signed by:

(1) In the case of corporations, a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the reporting form originates.

(2) In the case of a partnership, a general partner or duly authorized representative.

(3) In the case of a sole proprietorship, the proprietor or duly authorized representative.

(4) In the case of a municipal, State, or other public facility, either a principal executive officer, ranking elected official, or duly authorized employee.

6. Change of Discharge

The licensee shall notify the Department in writing as soon as it has knowledge of any significant changes or proposed changes in its discharge, including but not limited to:

A. the temporary or permanent termination of the discharge;

B. changes in the waste collection, treatment or disposal facilities;

C. changes in the volume or character of waste water flows;

D. permanent changes in industrial production rates;

E. the proposed addition, directly or indirectly, of toxic pollutants not authorized by the license or reflected in the application filed with the Department;

F. the addition to a municipal or quasi-municipal treatment system of industrial wastes which are categorically regulated by the U.S. EPA pursuant to the agency's pretreatment program.

7. Transfer of Ownership

In the event that any person possessing a license issued by the Department shall transfer the ownership of the property, facility or structure which is the source of a licensed discharge, without transfer of the license being approved by the Department, the license granted by the Department shall continue to authorize a discharge within the limits and subject to the terms and conditions stated in the license, provided that the parties to the transfer shall be jointly and severally liable for any violation thereof until such time as the Department approves transfer or issuance of a waste discharge license to the new owner. The Department may in its discretion require the new owner to apply for a new license, or may approve transfer of the existing license upon a satisfactory showing that the new owner can abide by its terms and conditions.

8. Records Retention

All records and information resulting from the monitoring activities required by this license including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of three (3) years.

9. Other Materials

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

A. They are not

(1) designated as toxic or hazardous under the provisions of Sections 307 and 311 respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law, or

(2) known to be hazardous or toxic by the licensee.

B. The discharge of such materials will not violate applicable water quality standards.

10. Removed Substances

Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department of Environmental Protection.

11. Bypass of Waste Treatment Facilities

The diversion or bypass of any discharge from facilities utilized by the licensee to maintain compliance with the terms and conditions of this license is prohibited, except (1) where unavoidable to prevent loss of life or severe property damage, or (2) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this license. The licensee shall notify the Department of Environmental Protection of each such diversion or bypass in accordance with the procedure specified in paragraph 6 above for reporting non-compliance. It is the duty of the licensee to take all feasible steps to prevent, minimize and mitigate bypasses. If infiltration or inflow of stormwater or ground water contribute to bypasses, the licensee shall submit to the Department for approval, a wet weather flow management plan. The plan shall describe measures implemented to maximize the volume of flow through the treatment facilities and the efficiency of the treatment process. Submission of this plan shall not remove any responsibilities of the licensee pursuant to paragraph 6.

12. Emergency Action-Electric Power Failure

Within thirty days after the effective date of this license, the licensee shall notify the Department of Environmental Protection of facilities and plans to be used in the event the primary source of power to its waste water pumping and treatment facilities fails. During power failure, all waste waters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the waste water facilities.

DEFINITIONS

FOR THE PURPOSE OF THIS LICENSE THE FOLLOWING SHALL APPLY

A. Grab Sample: An individual sample collected in a period of less than 15 minutes.

B. Composite Sample: A sample consisting of a minimum of eight grab samples collected at equal intervals during a 24-hour period (or a lesser period if specified in the section on Monitoring and Sampling) and combined proportional to flow or a sample continuously collected proportionally to flow over the same time period.

C. Daily Maximum For Concentration: The maximum value not to be exceeded at any time.

D. Daily Maximum For Quantity: The maximum value not to be exceeded during any day.

E. Weekly or Monthly Average: The sum of all daily samples measurement or test results made during a week or month divided by the number of tests or measurement made during the respective time period. Exception: bacteriological tests shall be calculated as a geometric mean.

F. Bypass: The diversion of waste water, either by act or by design, from any portion of a treatment facility or conveyance system.

WMUNCIPL

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status*. Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.