



State of Vermont
Department of Environmental Conservation

Agency of Natural Resources
Wastewater Management Division
103 South Main St. - Sewing Bldg
Waterbury VT 05671-040
Telephone: (802) 241-382
FAX: (802) 241-259

June 30, 2010

David Chaves
David Chaves Excavating, Inc.
PO Box 70
242 Chaves Road
Londonderry, VT 05148

**Re: Discharge Permit 3- 1529: Chaves Excavating, Inc. – Londonderry Quarry
Fact Sheet and Response Summary**

Dear Mr. Chaves,

Enclosed is your copy of Discharge Permit No. 3-1529, which has been signed on behalf of the Commissioner of the Department of Environmental Conservation. This permit authorizes the discharge of treated mine dewatering water and process wastewater from your proposed Londonderry Quarry to an unnamed tributary of the West River.

Please review the permit carefully and make note of the effluent limitations, monitoring requirements, and other special operating conditions. Based on comments received during the public comment period, Condition I.A.4.c has been added to the permit which requires that the accumulated solids in the detention basin be measure twice per year and the results reported on the WR-43 Discharge Monitoring Report. Also Condition I.A.4.d has been modified and now requires that the accumulated solids in the detention basin be removed when the depth of the accumulated solids reaches the 1.0 foot level and the dates of the solids removal be reported on the monitoring report.

It is our understanding based conversations on with your consulting engineer these comments were discussed with the Connecticut River Watershed Council prior to submitting their comments and there were no objections or concerns expressed regarding these new conditions.

If you have any questions regarding this permit, please contact Randy Bean at our office.

Sincerely,

Brian D. Kooiker, Chief
Direct Discharge and O&M Section

attachments

cc

Meddie Perry VHB Pioneer
Craig Jewett, Bruno Associates
Springfield Act 250 Office
Elizabeth Lord, VT ANR
David Deen, River Steward – Connecticut River Watershed Council



AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTEWATER MANAGEMENT DIVISION
103 SOUTH MAIN STREET, - THE SEWING BUILDING
WATERBURY, VERMONT 05671-0405

Permit No.: 3-1529
File No.: 13-10
PIN: NS09-0110
NPDES No.: VT0001368

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act, as amended, (10 V.S.A. Chapter 47 §1251 et. seq), and the Federal Clean Water Act, as amended (33 U.S.C. § 1251 et. seq),

David Chaves Excavating, Inc.
PO Box 70
242 Chaves Road
Londonderry, VT 05148

(hereinafter referred to as the "permittee") is authorized, by the Secretary, Agency of Natural Resources, to discharge from a facility located at:

7500 Route 100
Londonderry, Vermont

to the unnamed tributary of the West River, Class B at the point of discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

This permit shall become effective on date of signing.

This permit and the authorization to discharge shall expire on March 31, 2015.

Signed this 15th day of July, 2010.

Justin G. Johnson, Commissioner
Department of Environmental Conservation

By Christine Thompson
Christine Thompson, Director
Wastewater Management Division

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the date of signing and lasting through March 31, 2015, the permittee is authorized to discharge from outfall serial number S/N 001: mine dewatering water and mineral processing wastewater. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow Spring Dewatering ^(a)	1.175 mgd	1.440 mgd	Daily	Estimate ^(b)
Flow Operational Season Dewatering	0.104 mgd		Daily	Estimate ^(b)
Turbidity (annual average)	10 N.T.U. ^(c,d)		See (e) below	Grab ^(f)
Total Suspended Solids		Monitor only	See (e) below	Grab ^(f)
pH	Between 6.5 and 8.5 S.U.		See (e) below	Grab ^(f)

Samples of the discharge taken in compliance with the monitoring requirements specified above shall be taken from the outfall pipe after the detention basin and prior to entering the receiving water.

- (a) Spring dewatering limits may be invoked from March 15th through May 31st - see Condition I.2.b. below.
- (b) Flow shall be estimated based on pump run times.
- (c) The turbidity limitation is an annual average limitation, during dry weather conditions.
- (d) If a Turbidity sample exceeds 10 NTU, then the permittee shall immediately collect and analyze another sample of the discharge for Turbidity and Total Suspended Solids.
- (e) The discharge shall be sampled **twice per month** during spring dewatering and **once per month** during operational season dewatering.
- (f) Turbidity, Total Suspended Solids, and pH analyses shall be conducted on the same sample.

2. Seasonal Operations

- a. If the quarry operates and discharges seasonally, then the permittee shall inform the Wastewater Management Division, in writing, at least one week prior to the initial springtime dewatering activities each year.
- b. If the quarry operates and discharges seasonally, then the permittee shall note the commencement and completion dates of spring dewatering on the monthly discharge monitoring report.
- c. If the quarry operates and discharges seasonally, then the permittee may include a statement with the final monthly discharge monitoring report at the end of each quarrying season indicating that the quarry is operating seasonally and that there will be no discharge until the Department is otherwise notified. Submittal of monthly monitoring reports is not required when the quarry is not operation.

3. Metals Analyses

Within 180 days after commencing this discharge, the permittee shall collect and analyze an effluent grab sample from S/N 001 for the following total metals: antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc. The results of these analyses shall be included as an addendum to the appropriate discharge monitoring report:

Based upon the results of these analyses or any other analyses conducted on this discharge, this permit may be amended to require additional analyses or to establish specific effluent limitations.

4. Special Conditions

- a. The permittee shall maximize water recycling/reuse, to the extent feasible, to reduce the volume of water discharged.
- b. The permitte shall ensure that the pump intake is sufficiently above the top layer of any settled material in the quarry sump to prevent the pumping of settled solids to the detention basin.
- c. The permitte shall measure the depth of the accumulated solids in the detention basin in June and September. The dates of the sediment measurements and the depth of the accumulated sediment shall be noted on the WR-43 Discharge Monitoring Report.
- d. The permittee shall remove accumulated solids from the detention basin when the accumulated solids reach an average depth of 1.0 feet. The dates of solids removal shall be noted on the WR-43 Discharge Monitoring Report.

- e. Any material removed from the sumps or settling basin by permittee shall be disposed of in accordance with applicable state and federal regulations.
- f. The permittee shall inspect the area downgradient of the outfall regularly for signs of erosion. The permittee shall take prompt action to correct any instances of erosion resulting from this discharge.
- g. The permittee shall implement a spill prevention and control plan to prevent any fuel, chemical spills, or leaks from entering the wastewater treatment system. The permittee shall immediately implement all reasonable steps to prevent any equipment spills or leaks from entering the wastewater treatment collection system. The discharge of any fuels, chemicals, or other pollutants not specifically authorized by this permit is prohibited.
- h. These discharges shall not cause or contribute to violations of water quality standards.

5. Perchlorate Analyses

During the period of May through September 2014, the permittee shall collect and analyze an effluent grab sample from S/N 001 for perchlorate.

The result of this analysis shall be included as an addendum to the appropriate discharge monitoring report:

Based upon the results of these analyses or any other analyses conducted on this discharge, this permit may be amended to require additional analyses or to establish specific effluent limitations.

B. REAPPLICATION

If the permittee desires to continue to discharge after the expiration date of this permit, he shall apply on the application forms then in use at least 180 days before the permit expires.

Reapply for a Discharge permit by September 30, 2014.

C. OPERATING FEES

This discharge is subject to operating fees. The permittees shall submit the operating fees in accord with the procedures provided by the Secretary.

D. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using one of the following methods:

- a. "Most Probable Number" (MPN) method 9223B found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent approved edition(s). Premade formulations are available as Colilert and Colilert 18 from IDEXX Labs Inc., Westbrook, ME;
- b. EPA "membrane filtration" (MF) method 1603 using modified mTEC; or
- c. A single step membrane filtration (MF) method using mColiBlue 24 available from Hach Company, Loveland, CO.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The permittee shall identify the effluent sampling location used for each discharge.

2. Reporting

The Permittee is required to submit monitoring results as specified on a Discharge Monitoring Report (Form WR-43). Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the permittee must submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street, Sewing Building
Waterbury, Vermont 05671-0405

All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates;

- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

3. Recording of Results

The permittee shall maintain records of all information resulting from any monitoring activities required including:

- a. The exact place, date, and time of sampling;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques and methods used including sample collection handling and preservation techniques;
- e. The results of all required analyses.
- f. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- g. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.(A) of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

4. Additional Monitoring

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

PART II

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge:

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

In the event the permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

- a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),
- b. accidents caused by human error or negligence, or
- c. other causes such as acts of nature,

the permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

- i. cause of non-compliance
- ii. a description of the non-complying discharge including its impact upon the receiving water;
- iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
- iv. steps taken by the permittee to reduce and eliminate the non-complying discharge; and

- v. steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.

4. Quality Control

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

The permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The permittee shall analyze any additional samples as may be required by the Agency of Natural Resources to ensure analytical quality control.

5. Bypass

The diversion or bypass of facilities, necessary to maintain compliance with the terms and conditions of this permit, is prohibited, except where authorized under terms and conditions of an emergency pollution permit issued pursuant to 10 V.S.A. Section 1268.

6. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of

instrumentation, and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, and shall be submitted to Department representatives upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accord with 10 V.S.A., Chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization or order issued pursuant to 10 V.S.A., Chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

9. Emergency Pollution Permits

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;

- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters;
- (5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

10. Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,
- b. Halt, reduce, or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. to enter upon the permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;
- b. to have access to and copy any records required to be kept under the terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit; or
- d. to sample any discharge of pollutants.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary. The permittee shall also inform the

prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
 - i.. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.
 - ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.
 - iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

3. Confidentiality

Pursuant to 10 V.S.A. 1259(b):

“Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter.”

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. violation of any terms or conditions of this permit;

- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

5. Toxic Effluent Standards

That if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the secretary shall revise or modify the permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 10 V.S.A. §1281.

7. Civil and Criminal Liability

Except as provided in, "Bypass" (Part II, paragraph A.5.), "Power Failure" (Part II, paragraph A.10.), and "Emergency Pollution Permits" (Part II, paragraph A.9.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Civil penalties, as authorized under 10 V.S.A. §1274 and 10 V.S.A. §8010, shall not exceed \$10,000 a day for each day of violation. Criminal penalties, as authorized under 10 V.S.A. §1275, shall not exceed \$25,000 for each day of violation, imprisonment for up to six months, or both.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

9. Property Rights

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

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

11. Authority

This permit is issued under authority of 10 V.S.A. §1259 which states that: "No person shall discharge any waste, substance, or material into waters of the State, nor shall any person discharge any waste, substance, or material into an injection well or discharge into a publicly owned treatment works any waste which interferes with, passes through without treatment, or is otherwise incompatible with those works or would have a substantial adverse effect on those works or on water quality, without first obtaining a permit for that discharge from the Secretary", and under the authority of Section 402 of the Clean Water Act, as amended.

PART III**A. OTHER REQUIREMENTS**

This permit shall be modified, suspended or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C), and (D), 304(b) (2), and 307 (a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

B. DEFINITIONS

For purposes of this permit, the following definitions shall apply:

The Act - The Vermont Water Pollution Control Act, 10 V.S.A. Chapter 47

Annual Average - The highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

Average - The arithmetic means of values taken at the frequency required for each parameter over the specified period.

The Clean Water Act - The federal Clean Water Act, as amended.

Composite Sample - A sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

Daily Discharge - The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitation expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/l the daily discharge is calculated as the average measurement of the pollutant over the day.

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

Incompatible Substance (Pollutant) - Any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on these works or on water quality. This includes all pollutants required to be regulated under the Federal Clean Water Act.

Instantaneous Maximum - A value not to be exceeded in any grab sample.

Major Contributing Industry - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

Maximum Day (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs or gallons).

Mean - The mean value is the arithmetic mean.

Monthly Average - (Average monthly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

NPDES - The National Pollutant Discharge Elimination System.

Secretary - The Secretary of the Agency of Natural Resources

State Certifying Agency Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street
Waterbury, Vermont 05671-0405

Weekly Average - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

07/2000; u.4/2007

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTEWATER MANAGEMENT DIVISION
103 SOUTH MAIN STREET
WATERBURY, VERMONT 05671-0405

FACT SHEET

June 2010

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

FILE NO.: 13-10

PROJECT ID NO.: NS09-0110

NPDES NO: VT0001368

PERMIT NO.: 3-1529

NAME AND ADDRESS OF APPLICANT:

David Chaves Excavating, Inc.
PO Box 70
Londonderry, VT 05148

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Chaves Quarry
7500 Route 100
Londonderry, Vermont

RECEIVING WATERS AND CLASSIFICATION: Unnamed tributary of the West River: Class B. Class B waters are suitable for bathing and recreation; irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable of public water supply with filtration and disinfection.

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Vermont Department of Environmental Conservation for a permit to discharge into the designated receiving waters. The proposed facility will be engaged in quarrying operations.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. Copies will be made at a cost based on the previous Secretary of State Official Fee Schedule for Copying Public Records from 8:00 am to 4:30 pm, Monday through Friday.

II. Description of Discharge

This permit authorizes the discharge of 1.175 MGD, monthly average, and 1.440 MGD during the spring dewatering season and a discharge of 0.104 MGD, monthly average, during the operational season to an unnamed tributary of the West River of treated mined dewatering water and process wastewater from the Chaves Quarry. A quantitative description of the discharge in terms of significant effluent parameters is presented in section IV. below.

III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations: Page 2
Monitoring Requirements: Page 2 and 3

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

David Chaves Excavating Inc. currently owns and operates a quarry located at 7500 Route 100, Londonderry, VT. The quarry produces sand, aggregate and crushed stone used by the local municipalities in road construction projects and road maintenance. Any runoff generated during current operations can be managed via infiltrating the runoff into the quarry floor.

Due to the increased demand for material, David Chaves Excavating, Inc. is proposing to expand the quarry. Due to the increased size of the quarry the volume of process wastewater and dewatering water will drastically increase and it will no longer feasible to dispose of this wastewater via infiltration.

To manage this wastewater, David Chaves Excavating, Inc. is proposing to treat and discharge this wastewater to an unnamed tributary of the West River. Specifically the quarry floor will be graded such that the dewatering water and process wastewater from the crusher and dust control will be directed to a sump. The wastewater will be pumped from the sump to a detention basin system for treatment. The treated wastewater will then be discharged via a restricting outlet structure and enter an unnamed tributary of the West River.

A crusher will be used at the quarry. The crushing process will use wastewater during operations. Wastewater will be extracted from the sump for use in the crusher and the site is graded to direct the wastewater generated during the crushing operation back into the quarry for recycling or treatment.

Effluent Limitations

Flow

Based on the seasonal operations of the quarry, the permit contains flow limitations to reflect the minimal operations of the quarry during the winter. Specifically a significant amount of water will accumulate in the quarry and it will be necessary to remove this water each spring before normal quarry operations can resume. Therefore the draft permit contains "Spring Dewatering" effluent limitations of 1.175 MGD, monthly average, and 1.440 MGD, daily maximum. These limitations are based on the information contained in the discharge permit application.

After the "spring dewatering period", discharges from the quarry occur as necessary during the operational season to manage any runoff that has collected in the quarry or any process wastewater that has been generated during quarrying operations. The draft permit contains an effluent limitation of 0.104 MGD, monthly average, during the operational seasons. This limitation is based on the information contained in the discharge permit application.

Turbidity

The permit contains a turbidity limitation of 10 NTU, annual average, during dry weather conditions. This limitation is based on Section 3-04.B of the Vermont Water Quality Standards effective January 1, 2008. During the spring dewatering period, turbidity sampling is required twice per month. During normal quarrying operations, turbidity sampling is required once per month.

Total Suspended Solids (TSS)

The permit contains a monitoring requirement for Total Suspended Solids. During the spring dewatering period, TSS sampling is required twice per month. During normal quarrying operations, TSS sampling is required once per month.

pH

The permit contains a pH limitation of 6.5 to 8.5 SU. This limitation is based on Section 3-01.B.9 of the Vermont Water Quality Standards effective January 1, 2008. pH sampling is required twice per month during the spring dewatering period and once per month during normal quarrying operations.

Seasonal Operations

Condition I.A.2.a requires the permittee to provide written notice to the Agency prior to starting quarrying operations in the spring.

Condition I.A.2.b requires the permittee to note the dates of spring dewatering on the discharge monitoring report.

Condition I.A.2.c requires the permittee to provide written notice to the Agency of the seasonal shut down of the quarrying operation

Total Metals Analyses

Concentrations of heavy metals have been detected with some mineral formations in the state. Therefore the permit requires that this discharge be sampled for the following total metals: antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc. Sampling for these metals is required within 180 days after commencing this discharge and based upon the results of these analyses or any other similar analyses conducted on this discharge, the permit may be amended to require additional analyses or establish specific effluent limitations.

Perchlorate

The draft permit contains a monitoring requirement for perchlorate. Perchlorate is present in some types of explosives used in the mining and quarrying industry and has been detected in the discharges from other quarries. Therefore perchlorate monitoring is being required. Specifically, perchlorate sampling is required once during the period of May through September 2014 to ensure that data is available for the permit renewal application.

Special Conditions

Condition I.A.4.a requires that water recycling/reuse be maximized to reduce the volume of water discharged.

Condition I.A.4.b requires that the pump intake be sufficiently above the top layer of any settled material in the quarry sump to prevent the pumping of solids to the settling basins.

Condition I.A.4.c requires that the accumulated solids in the detention basin be measure twice per year and the results reported on the WR-43 Discharge Monitoring Report.

Condition I.A.4.d requires that the accumulated solids in the detention basin be removed witht the depth of the accumulated solids reaches the 1.0 foot level and the dates of solids removal be reported on the WR-43 Discharge Monitoring Report.

Condition I.A.4.e requires that any material removed from the sumps or settling basin be disposed of in accordance with applicable state and federal regulations.

Condition I.A.4.f requires that the area downgradient of the outfall be regularly inspected for signs of erosion and prompt action taken to correct any erosion resulting from the discharge.

Condition I.A.4.g requires that a spill prevention and control plan be implemented to prevent any fuel, chemical spills, or leaks from entering the wastewater treatment system.

V. Antidegradation Policy and Discharge Policy

Section 1-03.B.1.of the Vermont Water Quality Standards requires that the existing uses of the receiving waters be protected and maintained and the Secretary must consider the following factors in making a determination:

- a. Aquatic biota and wildlife that utilize or are present in the waters;
- b. Habitat that supports existing aquatic biota, wildlife and plant life;
- c. The use of the waters for recreation or fishing;
- d. The use of the water for water supply, or commercial activity that directly depends on the preservation of an existing high level of water quality; and
- e. with regards to the factors considered under (a) and (b) above, the evidence of the uses ecological significance in the functioning of the ecosystems or evidence of the use's rarity.

These factors have been considered in conjunction with this discharge and it has been determined that the existing uses of the receiving water will be maintained.

Section 1-03.C.2 of the Vermont Water Quality Standards requires that higher quality water be protected and the risk minimized to existing and designated uses. In addition a limited reduction in the existing higher quality of the waters may only be allowed if:

- a. the adverse economic and social impacts on the people of the state from maintaining the higher quality waters would be substantial and widespread;
- b. these adverse impacts would exceed the environmental, economic, social, and other benefits of maintaining the higher water quality; and
- c. there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources, and all cost effective and reasonable accepted agricultural practices

and best management practices, as appropriate for nonpoint source control, consistent with state law.

With respect to these requirements, this quarry provides material to local municipalities for road construction and maintenance, including winter maintenance, which provides safe travel to the citizens of Vermont. Therefore the requirements of a. and b. above have been met. With respect to c. above, the effluent limitations are water quality based which is the highest regulatory requirement for this discharge.

Per Section 1-04.A of the Vermont Water Quality Standards, new discharges of wastes may be allowed only when all the following criteria are met:

1. The proposed discharge is in conformance with all applicable provisions of these rules including classification of the receiving waters adopted by the Board as set forth in Chapter 4 of these rules.
2. There is neither an alternative method of waste disposal, nor an alternative location for waste disposal, that would have a lesser impact on water quality including the quality of groundwater, or if there is such an alternative method or location, it would clearly unreasonable to require its use.
3. The design and operation of any waste treatment or disposal facility is adequate and sufficiently reliable to ensure the full support of uses and to ensure compliance with these rules and with all applicable state and federal treatment requirements and effluent limitations.
4. Except as provided for in 10 V.S.A. 1259(d) and (f), the discharge of wastes other than nonpolluting wastes and stormwater is prohibited in Class A waters regardless of the degree of treatment provided.
5. Except as provided for in 10 V.S.A. 1259, the discharge of wastes that, prior to treatment, contained organisms pathogenic to human beings is prohibited.
6. The receiving waters will have sufficient assimilative capacity to accommodate the proposed discharge.
7. Assimilative capacity has been allocated to the proposed discharge consistent with the classification set forth in Chapter 4 of these rules.
8. The discharge of wastes to the thermocline or hypolimnion of any lake in manner that may prevent full support of uses is prohibited.
9. The discharge of sewage into Class B waters shall not pose more than a negligible risk public health. Compliance with this criterion shall include as assessment of both the level and reliability of treatment achieved and the impact of the discharge on the water quality of the receiving waters.

The Agency finds that these criteria have been met. Specifically,

1. The discharge conforms with the classification of the receiving water.
2. Since infiltration is no longer feasible, the only alternative is to discharge the wastewater.
3. Based on the current design criteria, the treatment system is adequate and sufficiently reliable to meet the effluent limitations.
4. The discharge is not to a Class A water.
5. The discharge, prior to treatment, does not contain organisms pathogenic to humans.
6. Adequate assimilative capacity exists to accommodate this discharge.

7. See 6 above.
8. The receiving water is not a lake.
9. The discharge does not contain sewage.

VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from May 17, 2010 through June 16, 2010. During this time interested persons may submit their written views on the draft permit. All written comments will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

Vermont Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division - Sewing Building
103 South Main Street
Waterbury, VT 05671-0405

Comments may also be faxed to: 802-241-2596.

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing.

Any public hearing brought in response to such a request or petition will be held in the geographical area of the draft discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

RESPONSE SUMMARY
DRAFT DISCHARGE PERMIT No. 3-1529
Proposed NPDES Industrial Discharge Permit
for
David Chaves Excavating, Inc.

This permitting action was the proposed issuance of a discharge it which authorizes discharge of 1.175 mgd, monthly average, and 1.440 mgd, daily maximum, of treated mine dewatering water and mineral processing wastewater from the proposed Chaves Quarry, 7500 Route 100, Londonderry, VT to an unnamed tributary of the West River, a Class B water at the point of discharge.

A draft permit for this discharge was placed on public comment from May 17, 2010 through June 25, 2010.

Public comments were received during the notice period from David Deen, River Steward, Connecticut River Watershed Council. The following is a summary of the relevant comments received on this draft Discharge Permit, and the Agency's responses to those comments.

Comment A: To ensure the proper protection of the receiving water, solids should not be allowed to accumulate in the detention basin. Based discussions with the consulting engineer for the permittee it was concluded that to ensure the proper operation of the detention basin, solids should be removed from the basin when on the depth of the accumulated solids has reached the 1 foot level. Therefore the permit should include a condition which requires that the solids be removed from the detention basin when the accumulated solids reach the 1 foot level.

Response A: Condition I.A.4.c has been added to the permit, this condition requires that the depth of the accumulated solids in the detention basin be measured in June and September of each year and reported on the WR-43 Discharge Monitoring Report. Condition I.A.4.d has been modified to require the removal of accumulated solids from the detention basin when the depth of the accumulated solids reaches an average depth of 1.0 feet. The dates of solids removal must also be noted on the WR-43 Discharge Monitoring Report.

Comment B: If after 2 years, it is demonstrated that during the spring dewatering period the effluent is very high quality, then the sampling frequency during the spring dewatering period should be reduced to once per year.

Response B: If after 2 years, the permittee believes that a sampling reduction is warranted, the permittee may petition the Agency to amend the permit and reduce the sampling requirements.