

**STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION**

In the matter of:

SA-000002

Date Entered: June 2, 2015

Bay View Food Products Company
2606 North Huron Road
Pinconning, Michigan 48650

SETTLEMENT AGREEMENT

This document results from allegations by the Department of Environmental Quality (DEQ), Water Resources Division (WRD). The DEQ alleges Bay View Food Products Company (Bay View Food), owner and operator of a produce pickling facility located at 2606 North Huron Road, Pinconning, Michigan, has been in violation of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.101 *et seq.* Bay View Food is a person, as defined by Section 301 of the NREPA, MCL 324.301, and is registered with the Michigan Department of Licensing and Regulatory Affairs as able to conduct business in the State of Michigan as a domestic, for-profit corporation under identification number 178624. Bay View Food and the DEQ agree to resolve the violations set forth herein through entry of this Settlement Agreement.

I. STIPULATIONS

Bay View Food and the DEQ stipulate as follows:

- 1.1 The NREPA MCL 324.101 *et seq.*, is an act that controls pollution to protect the environment and natural resources in the state.

- 1.2 Pollution Control, Part 31, Water Resources Protection, of the NREPA (Part 31) MCL 324.3101 *et seq.*, and the rules promulgated pursuant thereto, provide for the protection, conservation, and the control of pollution of the water resources of the state.
- 1.3 A National Pollutant Discharge Elimination System Permit (NPDES Permit) authorizes and regulates discharges into waters of the state.
- 1.4 The DEQ is authorized by Section 3112(4) of Part 31 of the NREPA, MCL 324.3112(4), to enter orders requiring persons to abate pollution, and the director of the DEQ may delegate this authority to a designee under Section 301(b) of the NREPA, MCL 324.301(b).
- 1.5 Bay View Food consents to the issuance and entry of this Settlement Agreement and stipulates that the entry of this Settlement Agreement constitutes a final order of the DEQ and is enforceable as such under Section 3112(4) of Part 31. Bay View Food agrees not to contest the issuance of this Settlement Agreement, and that the resolution of this matter by the entry of this Settlement Agreement is acceptable. It is also agreed that this Settlement Agreement shall become effective on the date it is signed by the chief of the WRD, delegate of the director, pursuant to Section 301(b) of the NREPA.
- 1.6 Bay View Food and the DEQ agree that the signing of this Settlement Agreement is for settlement purposes only and does not constitute an admission by Bay View Food that the law was violated.
- 1.7 The Signatory to this Settlement Agreement on behalf of Bay View Food agrees and attests that he is fully authorized to assure that Bay View Food will comply with all requirements under this Settlement Agreement.

- 1.8 Bay View Food shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in Section III, Compliance Program, of this Settlement Agreement.

II. FINDINGS

- 2.1 On May 23, 2007, the DEQ issued Bay View Food a Certificate of Coverage (COC) No. MIS210534 under Industrial Storm Water General Permit No. MIS210000 authorizing the discharge of storm water from Bay View Food's property to surface waters of the state (storm water permit).
- 2.2 On June 20, 2011, WRD staff conducted a storm water compliance inspection of Bay View Food. During the inspection, WRD observed that the storm water detention pond contained turbid, brown water undergoing mechanical aeration. This detention pond discharges to a vegetated ditch for approximately ¼ of a mile, flows into a roadside ditch for a few feet, then discharges into Willette Drain. The surface water in Willette Drain appeared to be darker in color and more turbid downstream of Bay View Food point of discharge. Due to these observations, the WRD staff instructed Bay View Food to collect water samples in the storm water detention pond, the vegetated ditch, and Willette Drain downstream of the Bay View Food point of discharge.
- 2.3 On July 1, 2011, the WRD staff issued Bay View Food a letter citing violations of the storm water permit observed during the WRD June 20, 2011 compliance inspection. Bay View Food was instructed to submit a sampling plan for the storm water discharging from the detention pond during the processing season due to the WRD observations in the detention pond, vegetated ditch, and Willette Drain.

- 2.4 Since August 2011, sampling results indicate that the discharge to the Willette Drain exceeds water quality standards established under the Part 4 administrative rules promulgated under Part 31 of the NREPA, 2006 AACS 323.1041 *et seq.*, for Dissolved Oxygen, Total Dissolved Solids, Phosphorus, CBOD₅, Ammonia and Total Suspended Solids.
- 2.5 On November 21, 2011, WRD met with Bay View Food to discuss WRD's observations on June 20, 2011, and WRD's letter dated July 1, 2011. Based on the discussion between WRD and Bay View Food, WRD issued a letter on December 12, 2011, to Bay View Food, documenting the following:
- a. Discharges from the storm water detention pond are violating water quality standards in the Willette Drain.
 - b. The discharges are not authorized under the Bay View Food's storm water permit. The facility's discharge requires an individual NPDES permit.
 - c. Storm water in the detention pond may need to be treated prior to discharging into Willette Drain.
- 2.6 WRD met with Bay View Food on January 5, 2012. Based on this meeting, WRD sent to Bay View Food a letter dated January 13, 2012, documenting the following:
- a. Bay View Food representatives agreed to submit the proper NPDES individual permit application to the WRD.
 - b. WRD staff committed to work on a specific sampling plan with the facility's consultant for the development of a proper NPDES permit.
 - c. Bay View Food agreed to develop wastewater treatment options capable of meeting the effluent requirements in the resulting NPDES permit.
- 2.7 Since February 2012, Bay View Food has submitted the required NPDES permit application, implemented several site improvements to assist with storm water

pollution prevention and implemented soil erosion control at the facility. However, the ongoing discharges from the storm water detention pond continue to violate water quality standards in the Willette Drain which is a violation of the Part 4 administrative rules promulgated pursuant to Part 31 of the NREPA and Bay View Food's storm water permit.

- 2.8 On January 14, 2013, the WRD sent draft NPDES Permit No. MI0059047 to Bay View Food. After discussions with Bay View Food, WRD sent a revised draft permit to Bay View Food on March 4, 2013.
- 2.9 On March 18, 2013, Bay View Food submitted a response letter explaining that Bay View Food is unable to achieve the effluent limits in the draft NPDES Permit No. MI0059047 and requested it remain in draft form while Bay View Food implements a Corrective Action Work Plan (CAP).
- 2.10 On April 24, 2013, Bay View Food met with WRD staff to discuss compliance options. Bay View Food agreed to develop and implement a CAP, continue water sampling, further investigate the source of pollutants and determine proper treatment options.
- 2.11 On May 6, 2013, WRD issued Notice No. EN-000002 to Bay View Food. The Notice documented the facility's noncompliance with Part 31 of the NREPA and the promulgated rules thereunder. It also explained the requirement to formally resolve past violations and ensure long term compliance is maintained through the entry of this Settlement Agreement between DEQ and Bay View Food.
- 2.12 On September 24, 2013, Bay View Food representatives and DEQ staff met to discuss the proposed draft NPDES Permit. On September 26, 2013, DEQ provided the revised NPDES Permit to Bay View Food.

- 2.13 On April 21, 2015, WRD staff approved Bay View Food's CAP dated February 28, 2014. The approved CAP, as amended, is Attachment A to this Settlement Agreement.

III. COMPLIANCE PROGRAM

It is therefore agreed and ordered that Bay View Food shall take the following action to prevent future violations of Part 31:

- 3.1 Bay View Food shall comply and implement Attachment A to this Settlement Agreement. Attachment A's requirements and deadlines shall be incorporated into and enforceable by the terms of this Settlement Agreement.
- 3.2 **Not later than March 1, 2016**, Bay View Food shall submit to the WRD an NPDES Permit Application for Discharges to Surface Waters. The application shall be submitted to the DEQ, WRD, Permits Section, P.O. Box 30458, Lansing, Michigan 48909-7958.
- 3.3 **Not later than 45 days** after receipt of the written notice from the DEQ, Bay View Food shall cure all deficiencies identified in the application. If the DEQ requires additional information or action by Bay View Food at any point during the permitting process to correct deficiencies in the application, the DEQ will notify Bay View Food in writing of those deficiencies. The DEQ agrees to discuss any deficiencies during the 45 days, but the deficiencies must be resolved by the 45 day deadline.
- 3.4 **Not later than 30 days** after receipt of a draft NPDES Permit by the DEQ to Bay View Food, Bay View Food shall provide comments to the DEQ on the terms and conditions, including effluent limitations and permit language. The DEQ shall

engage with Bay View Food and consider Bay View Food's comments for incorporation into the NPDES Permit.

- 3.5 **Upon issuance of the NPDES Permit** by the DEQ to Bay View Food, Bay View Food shall adhere to all requirements set forth in the NPDES Permit, except for the final effluent limitations identified in Part I.A.1. Final Effluent Limitations of the NPDES Permit.
- 3.6 **Upon issuance of the NPDES Permit** by the DEQ to Bay View Food, Bay View Food shall perform monitoring in accordance with Part I.A.1. Final Effluent Limitations of the NPDES Permit. All results from Bay View Food's monitoring shall be submitted to the DEQ in accordance with the NPDES Permit conditions.
- 3.7 **Not later than 180 days** from DEQ issuance of Bay View Food's NPDES Permit, Bay View Food shall adhere to all requirements including final effluent limitations set forth in Part I.A.1. Final Effluent Limitations of the NPDES Permit.
- 3.8 Bay View Food shall submit all reports, plans, specifications, schedules, or any other written documents required by this section to the DEQ, WRD Saginaw Bay District Supervisor, 401 Ketchum Street, Bay City, Michigan 48708. The cover letter with each submittal shall identify the specific paragraph and requirement of this Settlement Agreement that the submittal is intended to satisfy.

IV. APPROVAL OF SUBMITTALS

- 4.1 For any work plan, proposal, or other document, excluding applications for permits or licenses, that are required by this Settlement Agreement to be submitted to the DEQ by Bay View Food, the following process and terms of approval shall apply.

- 4.2 All work plans, proposals, and other documents required to be submitted by this Settlement Agreement shall include all of the information required by the applicable statute and/or rule, and all of the information required by the applicable paragraph(s) of this Settlement Agreement.
- 4.3 In the event the DEQ disapproves a work plan, proposal, or other document, it will notify Bay View Food, in writing, specifying the reasons for such disapproval. Bay View Food shall submit, within 45 days of receipt of such disapproval, a revised work plan, proposal, or other document which adequately addresses the reasons for the DEQ's disapproval. If the revised work plan, proposal, or other document is still not acceptable to the DEQ, the DEQ will notify Bay View Food of this disapproval. The DEQ agrees to discuss any deficiencies during the 45 days, but the deficiencies must be resolved by the 45 day deadline.
- 4.4 In the event the DEQ approves, with specific modifications, a work plan, proposal, or other document, it will notify Bay View Food, in writing, specifying the modifications required to be made to such work plan, proposal, or other document prior to its implementation and the specific reasons for such modifications. The DEQ may require Bay View Food to submit, prior to implementation and **within 30 days** of receipt of such approval with specific modifications, a revised work plan, proposal, or other document which adequately addresses such modifications. If the revised work plan, proposal, or other document is still not acceptable to the DEQ, the DEQ will notify Bay View Food of this disapproval.
- 4.5 Upon DEQ approval, or approval with modifications, of a work plan, proposal, or other document, such work plan, proposal, or other document shall be incorporated by reference into this Settlement Agreement and shall be enforceable in accordance with the provisions of this Settlement Agreement.

- 4.6 Failure by Bay View Food to submit an approvable work plan, proposal, or other document, within the applicable time periods specified above, constitutes a violation of this Settlement Agreement and shall subject Bay View Food to the enforcement provisions of this Settlement Agreement, including the stipulated penalty provisions specified in paragraph 9.3.
- 4.7 Any delays caused by Bay View Food's failure to submit an approvable work plan, proposal, or other document when due shall in no way affect or alter Bay View Food's responsibility to comply with any other deadline(s) specified in this Settlement Agreement.
- 4.8 No informal advice, guidance, suggestions, or comments by the DEQ regarding reports, work plans, plans, specifications, schedules or any other writing submitted by Bay View Food will be construed as relieving Bay View Food of its obligation to obtain written approval, if and when required by this Settlement Agreement.

V. EXTENSIONS

- 5.1 Bay View Food and the DEQ agree that the DEQ may grant Bay View Food a reasonable extension of the specified deadlines set forth in this Settlement Agreement. Any extension shall be preceded by a written request in duplicate to the DEQ, WRD, Enforcement Unit Chief, Constitution Hall, 525 West Allegan Street, Lansing, Michigan 48909-7773, and the WRD Saginaw Bay District Supervisor at the address in paragraph 3.2 no later than five business days prior to the pertinent deadline, and shall include:
- a. Identification of the specific deadline(s) of this Settlement Agreement that will not be met.
 - b. A detailed description of the circumstances that will prevent Bay View Food from meeting the deadline(s).

- c. A description of the measures Bay View Food has taken and/or intends to take to meet the required deadline.
- d. The length of the extension requested and the specific date on which the obligation will be met.

The WRD Saginaw Bay District Supervisor, in consultation with the Enforcement Unit Chief, shall respond in writing to such requests. No change or modification to this Settlement Agreement shall be valid unless in writing from the DEQ, and if applicable, signed by both parties.

VI. REPORTING

- 6.1 Bay View Food shall verbally report any violation(s) of the terms and conditions of this Settlement Agreement to the WRD Saginaw Bay District Supervisor by no later than the close of the next business day following detection of such violation(s) and shall follow such notification with a written report within five business days following detection of such violation(s). The written report shall include a detailed description of the violation(s), as well as a description of any actions proposed or taken to correct the violation(s). Bay View Food shall report any anticipated violation(s) of this Settlement Agreement to the above-referenced individual in advance of the relevant deadlines whenever possible.

VII. RETENTION OF RECORDS

- 7.1 Upon request by an authorized representative of the DEQ, Bay View Food shall make available to the DEQ all records, plans, logs, and other documents required to be maintained under this Settlement Agreement or pursuant to Part 31 or its rules. All such documents shall be retained by Bay View Food for

at least a period of three years from the date of generation of the record unless a longer period of record retention is required by Part 31 or its rules.

VIII. RIGHT OF ENTRY

- 8.1 Bay View Food shall allow any authorized representative or contractor of the DEQ, upon presentation of proper credentials, to enter upon premises of Bay View Food at all reasonable times for the purpose of monitoring compliance with the provisions of this Settlement Agreement. This paragraph in no way limits the authority of the DEQ to conduct tests and inspections pursuant to the NREPA and the rules promulgated thereunder, or any other applicable statutory provision.

IX. PENALTIES

- 9.1 Bay View Food agrees to pay to the State of Michigan **\$7,100** as partial compensation for the cost of investigations and enforcement activities arising from the violations specified in Section II of this Settlement Agreement. Payment shall be made within 30 days of the effective date of this Settlement Agreement in accordance with paragraph 9.5.
- 9.2 Bay View Food agrees to pay a civil fine of **\$4,200.00** for the NREPA violations specified in Section II of this Settlement Agreement. Payment shall be made within 30 days of the effective date of this Settlement Agreement in accordance with paragraph 9.5.
- 9.3 For each failure to comply with a specific deadline as contained in Paragraphs 3.2, 3.3, 3.4, 3.7, 4.3, 4.4, or the NPDES permit requirements as contained in Paragraphs 3.5 and 3.6, of this Settlement Agreement, Bay View Food shall pay

stipulated penalties of **\$100.00** per violation per day for 1 to 7 days of violation, **\$150.00** per violation per day for 8 to 14 days of violations, and **\$250.00** per violation per day for each day of violation thereafter.

- 9.4 To ensure timely payment of the above settlement amount, civil fine and stipulated penalties, Bay View Food shall pay an interest penalty to the General Fund of the State of Michigan each time it fails to make a complete or timely payment. This interest penalty shall be based on the rate set forth at MCL 600.6013(8), using the full increment of amount due as principal, and calculated from the due date for the payment until the delinquent payment is finally made in full.
- 9.5 Bay View Food agrees to pay all funds due pursuant to this agreement by check made payable to the State of Michigan and delivered to the Accounting Services Division, Cashier's Office for DEQ, P.O. Box 30657, Lansing, Michigan 48909-8157, or hand delivered to the Accounting Services Division, Cashier's Office for DEQ, 425 West Ottawa Street, Lansing, Michigan 48933. To ensure proper credit, all payments made pursuant to this Settlement Agreement must include the **Payment Identification No. WRD60013**.
- 9.6 Bay View Food agrees not to contest the legality of the costs paid pursuant to paragraph 9.1 or the civil fine paid pursuant to paragraph 9.2. Bay View Food further agrees not to contest the legality of any stipulated penalties or interest penalties assessed pursuant to paragraphs 9.3 and 9.4, but reserves the right to dispute the factual basis upon which a demand by the DEQ for stipulated penalties or interest penalties is made.

X. FORCE MAJEURE

- 10.1 Bay View Food shall perform the requirements of this Settlement Agreement within the time limits established herein, unless performance is prevented or delayed by events that constitute a "Force Majeure." Any delay in the performance attributable to a "Force Majeure" shall not be deemed a violation of Bay View Food's obligations under this Settlement Agreement in accordance with this section.
- 10.2 For the purpose of this Settlement Agreement, "Force Majeure" means an occurrence or nonoccurrence arising from causes not foreseeable, beyond the control of, and without the fault of Bay View Food, such as: an Act of God, untimely review of permit applications or submissions by the DEQ or other applicable authority, and acts or omissions of third parties that could not have been avoided or overcome by Bay View Food's diligence and that delay the performance of an obligation under this Settlement Agreement. "Force Majeure" does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of Bay View Food's actions or omissions.
- 10.3 Bay View Food shall notify the DEQ, by telephone, within 48 hours of discovering any event that causes a delay in meeting a compliance deadline as specifically stated in this Settlement Agreement. Verbal notice shall be followed by written notice within ten (10) calendar days and shall describe, in detail, the anticipated length of delay, the precise cause or causes of delay, the measures taken by Bay View Food to prevent or minimize the delay, and the timetable by which those measures shall be implemented. Bay View Food shall adopt all commercially reasonable measures to avoid or minimize any such delay.

- 10.4 Failure of Bay View Food to comply with the notice requirements and time provisions under paragraph 10.3 shall render this Section X void and of no force and effect as to the particular incident involved. The DEQ may, at its sole discretion and in appropriate circumstances, waive in writing the notice requirements of paragraph 10.3.
- 10.5 If the parties agree that the delay or anticipated delay was beyond the control of Bay View Food, this may be so stipulated, and the parties to this Settlement Agreement may agree upon an appropriate modification of this Settlement Agreement. However, the DEQ is the final decision-maker on whether or not the matter at issue constitutes a force majeure. The parties to this Settlement Agreement understand and agree that the final decision by the DEQ regarding a force majeure claim is not subject to judicial review. The burden of proving that any delay was beyond reasonable control of Bay View Food, and that all the requirements of Section X have been met by Bay View Food, rests with Bay View Food.
- 10.6 An extension of one compliance date based upon a particular incident does not necessarily mean that Bay View Food qualifies for an extension of subsequent compliance date without providing proof regarding each incremental step or other requirement for which an extension is sought.

XI. GENERAL PROVISIONS

- 11.1 With respect to any violations not specifically addressed and resolved by this Settlement Agreement, the DEQ reserves the right to pursue any other remedies to which it is entitled for any failure on the part of Bay View Food to comply with the requirements of NREPA and its rules.

- 11.2 The DEQ and Bay View Food consent to enforcement of this Settlement Agreement in the same manner and by the same procedures for all final orders entered pursuant to Part 31, MCL 324.3101 *et seq.*
- 11.3 This Settlement Agreement in no way affects Bay View Food's responsibility to comply with any other applicable state, federal, or local laws or regulations.
- 11.4 The WRD reserves its right to pursue appropriate action, including injunctive relief to enforce the provisions of this Settlement Agreement, and at its discretion, may also seek stipulated fines or statutory fines for any violation of this Settlement Agreement. However, the WRD is precluded from seeking both a stipulated fine under this Settlement Agreement and a statutory fine for the same violation.
- 11.5 Nothing in this Settlement Agreement is or shall be considered to affect any liability Bay View Food may have for natural resource damages caused by Bay View Food's ownership and/or operation of the facility. The State of Michigan does not waive any rights to bring an appropriate action to recover such damages to the natural resources.
- 11.6 In the event Bay View Food sells or transfers the property, it shall advise any purchaser or transferee of the existence of this Settlement Agreement in connection with such sale or transfer. Within 30 calendar days, Bay View Food shall also notify the WRD Saginaw Bay District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Settlement Agreement has been given to the purchaser and/or transferee. The purchaser and/or transferee of this Settlement Agreement must agree, in writing, to assume all of the obligations of this Settlement Agreement. A copy of that agreement shall be forwarded to the WRD

Saginaw Bay District Supervisor within 30 days of assuming the obligations of this Settlement Agreement.

- 11.7 The provisions of this Settlement Agreement shall apply to and be binding upon the parties to this action, and their successors and assigns.
- 11.8 This Settlement Agreement constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein.

XII. TERMINATION

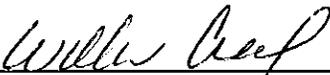
- 12.1 This Settlement Agreement shall remain in full force and effect until terminated by a written Termination Notice (TN) issued by the DEQ. Prior to issuance of a written TN, Bay View Food shall submit a request consisting of a written certification that Bay View Food has complied with the requirements of this Settlement Agreement and has made payment of any fines, including stipulated penalties, required in this Settlement Agreement. Specifically, this certification shall include:
- a. The date of compliance with each provision of the compliance program in Section III, and the date any fines or penalties were paid.
 - b. A statement that all required information has been reported to the district supervisor.
 - c. Confirmation that all records required to be maintained pursuant to this Settlement Agreement are being maintained at the facility.

The DEQ may also request additional relevant information. The DEQ shall not unreasonably withhold issuance of a TN.

SIGNATORIES

The undersigned CERTIFY they are fully authorized by the party they represent to enter into this Settlement Agreement to comply by consent and to EXECUTE and LEGALLY BIND that party to it.

DEPARTMENT OF ENVIRONMENTAL QUALITY

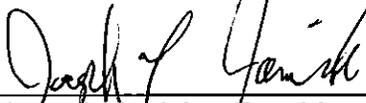


By: William Creal, Chief
Water Resources Division

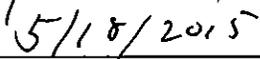


Date

BAY VIEW FOOD PRODUCTS COMPANY

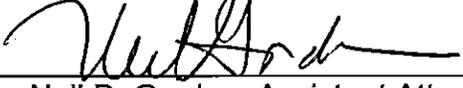


By: Joseph Janicke, President

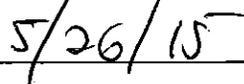


Date

APPROVED AS TO FORM:



By: Neil D. Gordon, Assistant Attorney General
For: S. Peter Manning, Chief
Environment, Natural Resources, and Agriculture Division
Michigan Department of Attorney General



Date

ATTACHMENT A



Corrective Action Work Plan Amendment - # 1

Location: 2606 North Huron Road, Pinconning, Michigan 48650

Date: April 14, 2015

AKT Peerless Project #: 6771s

Introduction

AKT Peerless Environmental & Energy Services (AKT Peerless) prepared a Corrective Action Work Plan dated February 28, 2014, which described corrective action measures proposed to be implemented at Bay View Foods (BVF). The goal of the proposed corrective action measures is to bring the site into compliance with Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, MCL 324.3101, et seq. (Part 31). The Work Plan was approved by the Michigan Department of Environmental Quality (MDEQ) on March 5, 2014.

The purpose of this Work Plan Amendment is to document work completed to date, including agreement by the MDEQ that deep well monitoring is not required, and provide an updated schedule of sampling to be completed at the property.

Work Completed To Date and Amendments

The corrective action work plan was developed over the course of several months including revisions prepared by AKT Peerless at the request of the MDEQ. During this time, certain work plan activities were proactively completed by AKT Peerless and BVF to evaluate site conditions. Items have also been implemented since approval of the Work Plan. Activities completed to date, in accordance with the Work Plan, include but are not limited to:

- Monthly outfall monitoring, routine inspection and cleaning of lift stations and catch basins, source inventory and pollutant minimization tasks which are on-going.
- In June 2013, AKT Peerless installed 13 monitoring wells for the purpose of characterizing the shallow perched groundwater unit.
- During the monitoring well installation, soil samples were collected from each monitoring well boring and submitted for laboratory analysis.

- In July 2013, AKT Peerless collected water samples from the 13 monitoring wells, the storm water pond, and 11 associated lift station/catch basins. A second catch basin/lift station sampling event is described in the Work Plan. AKT Peerless, in agreement with the MDEQ, will collect the second sampling event prior to submittal of the Subsurface Investigation Summary Report. The second catch basin/lift station sample will meet the Work Plan objections of evaluating quality and seasonal fluctuations, account for temporal changes, as well as evaluate the effectiveness of pollutant minimization activities.
- A licensed professional surveyor was retained to survey the 13 monitoring wells installed. The survey data was used to calculate groundwater flow and direction. As assumed within the Work Plan, groundwater at the subject property was determined to predominately flow in an eastern direction. The western portion of the subject property appears to flow to the west towards the surface water located beyond M-13. Based on the groundwater flow direction, and review with the MDEQ Project Manager Mr. Eric Chatterson, the proposed location of the three deep monitoring wells was deemed appropriate to evaluate deeper water bearing units at the subject property.
- In April 2014, AKT Peerless conducted soil borings for the purpose of installing the three proposed deep monitoring wells. The wells were advanced utilizing a hollow stem drill rig. With the exception of the shallow unconfined aquifer located within 10-feet below ground surface, no water bearing units were encountered to the depth of each boring. Glacial till (clays with trace sand and angular gravel) was encountered from immediately below the upper unconfined aquifer (6-10' bgs) to the depth of each boring (50-59' bgs).

AKT Peerless reviewed the subsurface geology encountered in each boring with the Mr. Chatterson, prior to termination of the boring. Mr. Chatterson also visited the site and observed drilling activities at MW-9D on April 2, 2014. Based on subsurface geology and in agreement with Mr. Chatterson, the borings were terminated at the following depths: MW-1D at 50.5'; MW-9D at 59'; and MW-14D at 58.5'. AKT Peerless and the MDEQ agreed that further advancement beyond the above depths was not necessary as the subsurface geology encountered was sufficient to prevent communication between the upper aquifer and deep water bearing units. In accordance with the Work Plan and with approval from the MDEQ, no deep monitoring wells were installed, and therefore the deep well and paired shallow well sampling proposed in the Work Plan were determined no longer necessary.

The above investigation activities will be summarized in the Subsurface Investigation Summary Report as described in the Work Plan.

Amended Sample Schedule

Based on work completed to date, the Work Plan sample schedule is amended as shown below:

Sample Schedule

Activity	Completed Prior to Approved Work Plan	Eliminated Based on Site Conditions	Month														
			Mar '14	Apr '14	May '14	Jun '14	Jul '14	Aug '14	Sept '14	Oct '14	Nov '14	Dec '14	Jan '15	Feb '15	Mar '15	Apr '15	May '15
Outfall Monitoring ¹			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X ¹
Monitoring Well Install	X																
Soil Sampling	X																
Monitoring Well Sampling S = Shallow D = Deep	X (S)	X (D)															
Lift Station/ Basin Sampling ²	X																X ²
Lift Station/ Basin Targeted Characterization ³							X		X								X ³

Table Notes:

1. As stated within the Work Plan, the Monthly Outfall Monitoring will continue until development of the final NPDES permit.
2. Due to freezing temperatures, the 2015 Lift Station/Basin Targeted Characterization is revised to Spring 2015, rather than the above proposed sampling event in January 2015. Additional events may be conducted as necessary for evaluation of pollution minimization efforts and site changes.
3. The third Lift Station / Basin Targeted Characterization event is revised to Spring 2015 and additional events may be added as necessary to evaluate pollution minimization efforts and site changes.

Corrective Action Work Plan Schedule

For additional clarity, the schedule from the MDEQ approved Work Plan is included below with columns added to reflect the status and the actual/estimated completion dates.

Proposed Activity	Proposed Completion Date	Status	Actual / Estimated Date
Work Plan Approval by MDEQ	N/A	Complete	March 5, 2015
Initiate Investigations/Source Inventory	1 month from approved work plan	Complete	June 2013
Proposed Monitoring Wells Installed	2 month from approved work plan	Complete	June 2013 / April 2014
Groundwater monitoring events complete	13 months from approved work plan	On-going, MWs complete, pending final lift station events	May 2015
Annual Pollutant Minimization Plan	February 28 of each year	Initial complete, update yearly	February 2015
Subsurface Investigation Summary Report	15 months from approved work plan	On-going	June 2015
Final remedy/treatment feasibility and design	24 months from approved work plan	On-going	March 2016
Application for NPDES Permit	24 months from approved work plan	On-going	March 2016
Draft NPDES Permit	Pending MDEQ Review/Approval	On-going	TBD
Begin implement/installation of final remedy/treatment	1 month from approved draft NPDES Permit	On-going	TBD
Final NPDES Permit	Pending MDEQ issuance	On-going	TBD
Compliance with NPDES Permit	6 months from issuance of the Final NPDES Permit	On-going	TBD



Corrective Action Work Plan

2606 North Huron Road, Pinconning, Michigan 48650

PREPARED FOR: Bay View Foods
2606 North Huron Road
Pinconning, Michigan 48650

PROJECT # 6771s-4-18

DATE: February 28, 2014



TABLES

Summary of Analytical Results

Summary of Dissolved Oxygen Analytical Results

Summary of Chloride Analytical Results

Summary of Ammonia Analytical Results

Summary of Phosphorus Analytical Results

Summary of Total Dissolved Solids Analytical Results

Summary of Total Suspended Solids Analytical Results

Summary of Carbonaceous Biochemical Oxygen Demand Analytical Results



CORRECTIVE ACTION WORK PLAN

2606 North Huron Road, Pinconning, Michigan 48650

1.0 Introduction

AKT Peerless Environmental & Energy Services (AKT Peerless) has prepared this Corrective Action Work Plan, which summarizes corrective action measures proposed to be conducted at the Bay View Food Products Company (BVF) facility located at 2606 North Huron Road, Pinconning, Michigan (herein referred to as the Subject Property or Property). The purpose of the proposed corrective action measures is to bring the site into compliance with Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, MCL 324.3101, et seq. (Part 31).

This work plan consists of two major elements: 1) an Interim Outfall Monitoring Program; and 2) a Pollutant Minimization Program. This plan provides a detailed description of tasks and a schedule for completion of the corrective action tasks at the Subject Property.

It is BVF's intent that the completion of proposed tasks result in an effective and achievable National Pollution Discharge Elimination System (NPDES) Permit. The facility is currently covered under the Industrial Storm Water General Permit No. MIS210000 with a Certificate of Coverage No. MIS210534.

Storm water at the Property primarily discharges to the Willette Drain located approximately 1/8th of a mile south of BVF. The Willette Drain flows east for approximately 2 miles where it discharges into Saginaw Bay. The location of the Property, nearby surface water, and layout of the facility is shown on the attached Topographic Site Location Map, Aerial Photographs and Site Maps. A storm water flow diagram for the Subject Property is attached.

2.0 Surface Water Compliance Summary

The Michigan Department of Environmental Quality (MDEQ) conducted a storm water compliance inspection of the facility on June 20, 2011. The MDEQ observed an on-site storm water detention pond with mechanical aeration discharging turbid water through a vegetated outfall ditch (Outfall 001) to the Willette Drain. At that time, the MDEQ requested BVF perform storm water sampling of the outfall discharge. The outfall and various other locations on and off site were sampled periodically from 2011 to the present (see attached summary tables). The sampling identified that site discharge is exceeding water quality standards for various parameters including Dissolved Oxygen (DO), Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Phosphorous, Carbonaceous Biochemical Oxygen Demand (CBOD), and Ammonia.

Based on the sampling results, several meetings and correspondences from 2011 to 2013 have occurred between the MDEQ and BVF. As a result, a preliminary schedule of compliance was developed between the parties in which, BVF prepared a NPDES application. The application was submitted on February 29,



3.0 Site Background and Description

3.1 Location of Subject Property

The Subject Property is located in Fraser Township (Pinconning mailing address), Bay County, Michigan. The Property is located east of North Huron Road and south of Almeda Beach Road and consists of two adjoining rectangular-shaped parcels (Parcel No. 09-040-002-300-150-01, 09-040-002-300-140-00) comprising a total of approximately 38.0 acres. Both parcels of the Subject Property are currently utilized by BVF. The Subject Property is zoned Industrial and is located in an area predominately utilized for agricultural purposes.

Consumers Energy provides natural gas and electric services to the Subject Property. The City of Pinconning provides potable drinking water to the Property. Sanitary sewer services are provided by West Bay County.

3.2 Historical Use of Subject Property

Based on records reviewed by AKT Peerless, the Subject Property consisted of undeveloped, agricultural land from at least 1938 until prior to 1950 when several single-family residences were constructed along North Huron Road on the western portion of the Subject Property. At least one residence was located on the northeastern portion of the Property along Almeda Beach Road. Two exploratory oil/gas wells were installed on the northeast portion of the Property in the late 1940s. By the early 1960s, the original portion of the main facility building (Building 9) was constructed along with the several wooden brine tanks used for pickle fermentation. Sometime prior to 1969, other storage and maintenance buildings (Buildings 2, 4, 5, and 6) were constructed. In addition, by this time unlined on-site lagoons were in use on the Property due east of the brine tanks. Following construction of the current wastewater treatment system and connection to the West Bay County sanitary sewer system the lagoons were abandoned. The current storm water detention pond is located in the general area of the former lagoons.

From the late 1980s to present, significant on-site development occurred including construction of the remaining on-site buildings and installation of the current fiberglass fermentation tanks. Buildings 11 and 12 were originally utilized by WACO Manufacturing from 1979 through 2004 for undetermined light industrial operations, but are now used for storage and shipping by BVF. All former residences on the Subject Property were demolished between 1992 and 2005.

3.3 Current Use of Subject Property

Bay View Foods is a receiving and holding facility for fresh and brined cucumbers, as well as pepper products to be processed either on the premises or elsewhere for the food industry. Approximately 1,300 on-site fermentation tanks are filled during the summer produce receiving season and unloaded throughout the year. The produce receiving season occurs from approximately the beginning of July through mid-September each year.

Produce is delivered to the facility typically from local farmers. Produce is unloaded at a grading building where the produce is graded based on size and washed. The washed produce is then transported via conveyer or truck to a fermentation tank. Produce is added along with the appropriate proportions of water, sodium chloride, calcium chloride, and potassium sorbate. The fermentation process is complete within a month and the process is monitored daily for each tank. Typically brine is reused throughout



<u>Source</u>	<u>Estimated Volume</u>
Surface Water/Ground Water	29 million gallons per year

The above estimate will be refined based on actual flow data collected at the site during the proposed investigation activities. Based on estimates made in January 2012, the drain tiles/ground infiltration accounts for an estimated maximum volume of 3.5 million gallons per year or 12% of the total discharge.

4.0 Previous Investigation Activities

Since the July 1, 2011 request from the MDEQ, several surface water assessment activities have occurred at the Subject Property. Sampling events, locations, parameters and target objectives were developed as a result of meetings, correspondence, and discussions between AKT Peerless and the MDEQ.

The sample events included both the submittal of samples for laboratory analysis and collection of field data from select on-site and off-site locations. Samples have been collected from various locations including the Property outfall at the Property boundary and immediately prior to connection with the Willette Drain, the on-site storm water pond, and the on-site storm water conveyance system. In addition, samples were collected from the Willette Drain and Saginaw Bay downstream from the Subject Property. Regional surface water comparison samples were collected from the Willette Drain and M-13 roadside ditch upstream from the Subject Property and nearby Johnson Drain. Recent precipitation events were recorded for each sample event.

Existing sample locations are depicted on the Figure 3, Storm Water Sample Location Map. Refer to the attached summary tables for the field and laboratory analytical results.

A flow meter was installed at Outfall #001 in June 2013. Previously flow data at the site was based on site estimates of groundwater infiltration and calculations based on surface area/average rain fall. Actual flows as recorded with the flow meter will be incorporated into future reporting.

5.0 Site Geology and Hydrology

5.1 Geology and Hydrology Conditions Based on Published Material

AKT Peerless reviewed published geological survey maps for geologic, hydrologic, and topographic conditions at the Subject Property.

According to the MDNR Geological Survey Division's *Bedrock Geology of Southern Michigan* (1987), bedrock beneath the Subject Property is classified as the Saginaw Formation, which is included in the Pottsville Series within the Mississippian System of the Paleozoic Era.

According to the Michigan Geological Survey Division's publication, *Quaternary Geology of Southern Michigan* (1982), soils in the area are regionally classified as lacustrine sand and gravel. These soils are described as pale brown to pale reddish brown, fine to medium sand, commonly including beds or lenses of small gravel. These soils occur chiefly as former beach and near-offshore littoral deposits of glacial Great Lakes and may include intercalated lacustrine clay. Soil thickness ranges from 3 to 100 feet.



Sand (1 to 7 feet bgs): Brown to dark brown, fine to medium grained, loose to medium dense, trace silt. An additional wet sand layer was observed in one boring between 13.0 and 15.0 feet bgs.

Clay (7 to 18 feet bgs): Brown and gray, stiff to very stiff and hard, sandy, silty, with trace gravel.

A shallow perched ground water unit was encountered within approximately 1 foot bgs. A discontinuous confined groundwater unit was encountered within a saturated sand layer at 13.0 to 15.0 feet bgs in one boring. No groundwater flow data was collected.

Recorded from a Water Well Log:

The following soil types were observed in a potable water well formerly located on the western portion of the Subject Property.

Sand (0 to 6 feet bgs)

Clay (6 to 64 feet bgs)

Limestone (64 to 88 feet bgs)

Clay (88 to 98 feet bgs)

Gravel (98 to 105 feet bgs)

Limestone (105 to 145 feet bgs)

Sand (145 to 155 feet bgs)

Blue Shale (155 to 208 feet bgs)

Sandstone (208 to 216 feet bgs)

According to the Michigan Online Database for Oil and Gas Wells, two oil and/or gas wells appear to have been advanced on the northwestern portion of the Subject Property. Both wells are identified as "dry hole," and as plugged and inactive. The subsurface geology was generally recorded as Drift (Sand) to 85 feet bgs and various bedrock formations to a maximum depth of 2,929 feet bgs.

6.0 Corrective Action Measures

BVF is proposing a phased approach to evaluate the Subject Property and determine the best method of management that includes: (1) source characterization; (2) source reduction; and (3) remedy implementation.

The proposed Corrective Action Plan consisted of two elements: 1) an interim discharge monitoring program, and 2) a Pollutant Minimization Program (source characterization, hot spot removal, and control).

6.2 Pollutant Minimization Plan

BVF proposes to implement a Pollutant Minimization Plan, which will include the following: 1) preparing a detailed inventory of pollutant sources present at the site, 2) conducting regional and site specific background groundwater quality characterization, 3) conducting feasibility studies to evaluate reasonable and prudent source control, and 4) remedy implementation (source control, structural controls, possible hot spot removal, treatment and modified management practices).

The characterization activities proposed in this work plan will be utilized to scope additional targeted evaluations (if necessary), develop a remedy, and/or support the development of a final NPDES permit at the Property.

6.2.1 Source Inventory

The identification and characterization of likely pollutant sources is the first step for any storm water assessment, remedial investigation or corrective action plan. AKT Peerless will prepare an inventory of sources that may potentially be impacting surface water discharges. The inventory will be used to conduct an evaluation of measures necessary to reduce the discharge of pollutants, identify sources in need of further characterization, and ultimately demonstrate that all reasonable and effective source control has been completed at the site.

Likely pollutant sources will be identified by evaluating current and past site operations, site maps, photos, available historical environmental data, interviews with knowledgeable site personnel, and physical on-site investigations.

Potential source areas will be identified on a spreadsheet and if practical on the site maps. If available, information on the potential volume, mass, likelihood of contact with storm water, transport pathway, and existing structural/non-structural controls for each source will be documented in as much detail as possible. Development of an accurate source inventory including description of site operations, material handling practices, and underground infrastructure is dependent on the physical evaluation of on-site operations and information sources available. .

The source inventory will become part of the site conceptual model. The site conceptual model is the description of probable site conditions that serves as the framework against which observations and theories are compared.

To assist with corrective action activities related to the identified sources, AKT Peerless will develop a preliminary list of decision making factors. The identified decision factors will follow feasibility study principles and will include items such as ease of implementation, effectiveness, and cost. These factors can then be used at a later date to evaluate corrective action measures and demonstrate the rationale for the source control measures selected.

Source evaluation and control is often an iterative process. AKT Peerless anticipates that the source inventory, transport pathways, and associated controls will increase over time as additional site details are revealed.

Finally, it is anticipated the source inventory may define additional site investigation/tasks needs, if any, which are not included in this work plan. These additional site investigations/tasks may include targeted source characterization, evaluating measures necessary for reduction of pollutants at sources, implementation of source BMPs, monitoring the effectiveness of BMPs, updates to the storm water plan



6.2.2.2 On-site Assessment

Concurrent with the regional groundwater quality evaluation, AKT Peerless will also conduct an on-site surface water and groundwater assessment. In collaboration with the MDEQ, portions of this proposed activity have been completed in attempt to obtain data to better develop future site characterization activities. Results will be provided in a future submittal.

The purpose of this task is to determine if existing groundwater quality is: 1) impacted with constituents relevant to the draft NPDES permit; and 2) impacting the on-site footing drain tile / storm water collection system thereby contributing to discharges at the Subject Property.

The on-site monitoring wells will be utilized to evaluate potential impacts from current and historical site operations. To establish site source area conditions and evaluate the potential for groundwater infiltration impacting storm water discharge quality, a combination of groundwater monitoring wells generally paired with select catch basins/lift stations will be assessed.

Activities will focus on select locations in the brine tank area, the drain tile and storm water conveyances, catch basins and lift stations, near the on-site detention basin, and proximate to Outfall #001. The monitoring well and catch basin/lift station paired points are depicted on Figure 5, the Sample Location Map.

The monitoring wells were installed as close as reasonable to paired catch basins/lift stations on the estimated upgradient direction, so as to provide comparable data to the storm water/groundwater flowing in the catch basins/lift stations.

The lift station/catch basin water samples will consist of a composite of water accumulated in the bottom of the structures.

AKT Peerless personnel will identify appropriate well installation locations in conjunction with BVF representatives to ensure they are installed in areas that are relevant to site conditions, are not disruptive to BVF operations, are sufficiently protected, and reasonably accessible. AKT Peerless proposes to conduct two groundwater monitoring events over the course of one year to evaluate on-site conditions. Catch basins and lift stations will be evaluated through a combination of two sampling events over the course of a year and a short term targeted characterization study, which will be conducted before and after select cleaning events.

The Monitoring Well Sampling and Analysis Plan is described in Section 6.2.4. The Lift Station and Catch Basin Sampling and Analysis plan is described in Section 6.2.6. The subsurface investigation is summarized in Section 6.2.7.

It is anticipated and recommended that select source control activities will be implemented on-site during the time of the proposed scope of work. The above described sampling conducted within the lift stations, catch basins (storm water conveyance system) may assist in evaluating the effectiveness of these operational changes. For example, at the time of this work plan, BVF has implemented a routine cleaning schedule for storm water catch basins, drain tile catch basins, and lift stations. Storm sewer system cleaning activities consist of vacuum events in which accumulated solids and water are removed and disposed of directly into the on-site waste water treatment system. At the request of the MDEQ, targeted sampling will be conducted within select lift stations and catch basins to provide a means of evaluating the effectiveness and required frequency of the routine cleaning.

Samples were submitted for laboratory analysis of select parameters relevant to the effluent limits of concern in the draft NPDES permit issued by the MDEQ. AKT Peerless' sampling and analysis plan for soil samples is illustrated below:

Soil - Sampling and Analysis Plan

Sample Location	Matrix	Number of Samples	Analytical Parameters
Monitoring Well Soil Borings	Soil	25	pH Ammonia as nitrogen Total organic content Components of TDS: calcium, chloride, iron, magnesium, potassium, sodium, and sulfate Total phosphorous

Results of initial soil sampling activities will be evaluated and presented in the Subsurface Investigation Report.

6.2.5 Monitoring Well Sampling and Analysis

At the time of the submittal of this work plan, AKT Peerless has completed one groundwater monitoring event of the shallow monitoring wells which was conducted in July 2013. The groundwater monitoring event included:

1. Collecting groundwater elevation measurements in all wells.
2. Collecting groundwater quality field measurements (e.g., dissolved oxygen and specific conductance).
3. Collecting groundwater samples for laboratory analysis.

The depth to water was measured at each well during the monitoring event. Measurements are collected using an electronic water level indicator from the top of the well casing. Survey work necessary to determine groundwater flows has not yet been completed.

A groundwater sample was collected from each well using low-flow, minimal drawdown methods consistent with MDEQ guidance. Samples were collected using a peristaltic pump and new polyethylene tubing dedicated to each well. Groundwater quality parameters were measured during well purging using an electronic water quality meter to determine when the well has stabilized to within metrics generally consistent with MDEQ guidance.

Parameters monitored include a selection of both field and laboratory methods, as well as groundwater elevations. Analytical parameters include those relevant to the effluent limits of concern in the draft NPDES permit issued by the MDEQ.

If a deep potable aquifer is encountered, a second groundwater monitoring event is proposed to evaluate the three deep monitoring wells and the three paired shallow monitoring wells. Sampling of these wells will generally follow the above procedures, including use of low-flow, minimal drawdown procedures for the collection of samples from the deep wells. AKT Peerless will notify the MDEQ prior to the installation of the deep monitoring wells.

2. Collecting water quality field measurements (e.g., dissolved oxygen and specific conductance).
3. Collecting water samples for laboratory analysis.

Conditions observed including the presence of flowing water will be noted for each sample location. A sample will be collected from each structure using either a sample pole and new polyethylene sample container, or a peristaltic pump and new polyethylene tubing dedicated to each structure. Water quality parameters will be measured from a sample collected from each structure. Some inaccuracy of field parameters is expected based on the dynamic water conditions within the structures (e.g. variable dissolved oxygen).

Parameters to be monitored include a selection of both field and laboratory methods. Analytical parameters include those relevant to the effluent limits of concern in the draft NPDES permit issued by the MDEQ. AKT Peerless' sampling and analysis plan for the lift station/catch basins is illustrated below:

Semi-Annual Lift Station/Catch Basin - Sampling and Analysis Plan

Sample Identification	Matrix	Number of Samples	Analytical Parameters / Field Measurements
Lift Station, Catch Basin, Storm water pond	Groundwater / Surface Water	12 Samples Two Events	pH (field measured) Temperature (field measured) DO (field measured) Specific conductance (field measured) ORP (field measured) Ammonia as nitrogen CBOD ₅ TDS TSS Total phosphorous Sample collection date Sample collection time Time since last storm event (1/10 of inch or larger) Size of last storm event (inches) Precipitation within the last 24 hours (inches) Date of last basin cleaning event Narrative description: color, odor, physical characteristics (field observation)

Targeted Characterization Study

A targeted investigation will be conducted to evaluate the on-site lift stations and catch basins. Specifically, monitoring will be conducted in association with the lift stations and catch basin cleaning events. The targeted monitoring is proposed to be conducted every other month for 6 months for a total of three events. During this time period, a series of field indicator parameters will be used to evaluate the impact of the cleaning activities. Field indicator parameters will be collected both prior to

Sample Schedule

Activity	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Outfall Monitoring	X	X	X	X	X	X	X	X	X	X	X	X
Monitoring Well Install	X											
Soil Sampling	X											
Monitoring Well Sampling S = Shallow D = Deep			X (S)					X (D)				
Lift Station/ Basin Sampling			X								X	
Lift Station/ Basin Targeted Characterization					X		X		X			

Subsurface Investigation Sampling and Analysis Plan Summary

Monitoring Well Identification	Monitoring Well Purpose	Monitoring Well Samples	Associated Lift Station / Catch Basin ID	Lift Station / Catch Basin Purpose	Lift Station / Catch Basin Samples
MW-1	Regional GW flow & quality	2 soil 2 water	--	--	--
MW-1 D	Deep aquifer assessment (upgradient)	1 water	--	--	--
MW-2	Regional GW flow & quality	1 soil 1 water	--	--	--
MW-3	Upgradient on-site GW flow & quality	2 soil 1 water	AL-1	Evaluate Process & GW Infiltration	2 Events
MW-4	Upgradient on-site GW flow & quality	2 soil 1 water	AL-8	Evaluate Process & GW Infiltration	2 Events
MW-5	Site GW flow & quality	2 soil 1 water	AL-2	Evaluate Process & GW Infiltration	2 Events
MW-8	Site GW flow & quality	2 soil 1 water	AL-9	Evaluate Process & GW Infiltration	2 Events
MW-9	Site GW flow & quality	2 soil 2 water	Storm Water Pond	Evaluate Storm Water Quality and & GW Infiltration	2 Events

7.0 Report Preparation

AKT Peerless proposes to complete the following reporting activities:

- 1) Outfall Monitoring Monthly Updates
- 2) Annual Pollutant Minimization Plan Report
- 3) Subsurface Investigation Report

The proposed reporting activities are summarized below.

Outfall Monitoring Reports (Monthly)

The monthly outfall monitoring data will be summarized in a spreadsheet. If required, the data will also be entered into the MDEQ Electronic eDMR system.

Annual Pollutant Minimization Plan Report (February 28)

On or before February 28 of each year after approval of this work plan, BVF is proposing to submit a Pollutant Minimization Plan status report for the previous calendar year to the MDEQ. The report shall include: 1) monitoring results for the past year, 2) updated list of potential pollutant sources, 3) evaluation and demonstration of reasonable and prudent source controls, and 4) summary of actions taken to reduce or eliminate identified sources. As appropriate, the report will also include a plan for proposed actions for the upcoming year.

Subsurface Investigation Report

Upon completion of the subsurface investigation, AKT Peerless will prepare a summary report. The subsurface investigation summary report will consist of a description of activities completed to date, laboratory analytical results compared to relevant criteria, an evaluation of the data with respect to on-site operations and existing discharges, geological information (i.e. groundwater contour map, cross sections, etc.) and recommendations or conclusions.

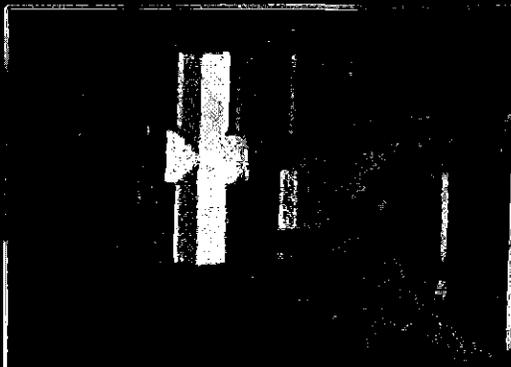
As part of the summary report, AKT Peerless will compile analytical data into a comprehensive database and summary tables. Data will be distinguished by both location and monitoring date.

Groundwater and surface water elevation data will be assembled in a tabular format and graphically presented. This data will be used to determine the regional groundwater flow direction, localized groundwater movement patterns within the Property, and, if possible, localized patterns adjacent to the storm water conveyances being monitored. The comparison of groundwater elevation data to drain tile invert elevations, in conjunction with the monitoring analytical data, will assist with identifying if contaminated groundwater is potentially infiltrating the storm water conveyance system. A groundwater surface contour map, indicating the direction(s) of groundwater flow on and off the site will be prepared for each measurement event.

The field and laboratory analytical data will be evaluated to determine regional background conditions relevant to the draft NPDES permit and to assess the potential impact of on-site activities. The data will

Figures

E. Alameda Beach Rd.



13



N. Huron Rd.

© 2011 Google

OUTFALL DRAIN

Kaiser Rd.

WILLETTE DRAIN

LEGEND

— APPROXIMATE PROPERTY LINE

- - - OPEN DRAIN

AKTPEERLESS

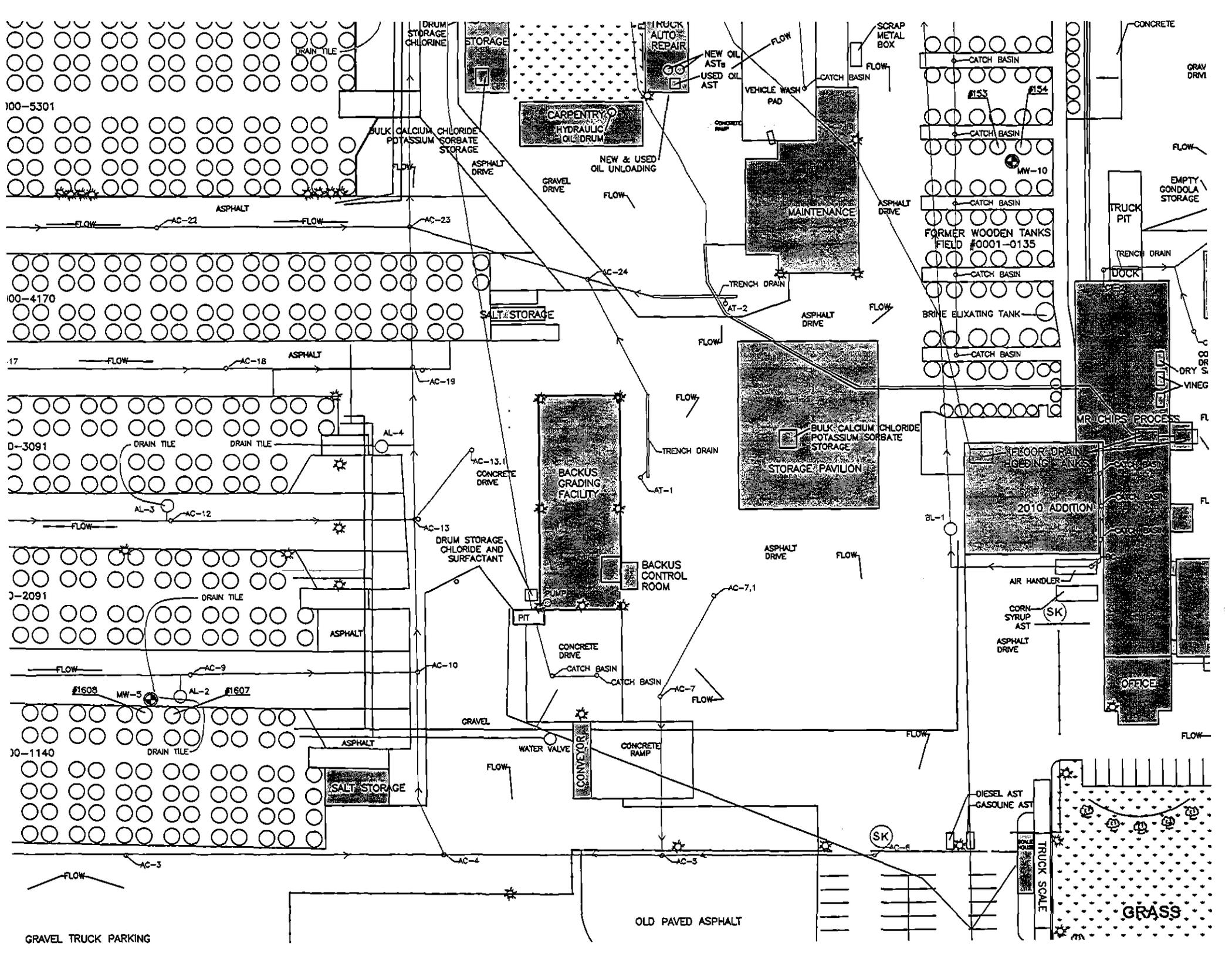
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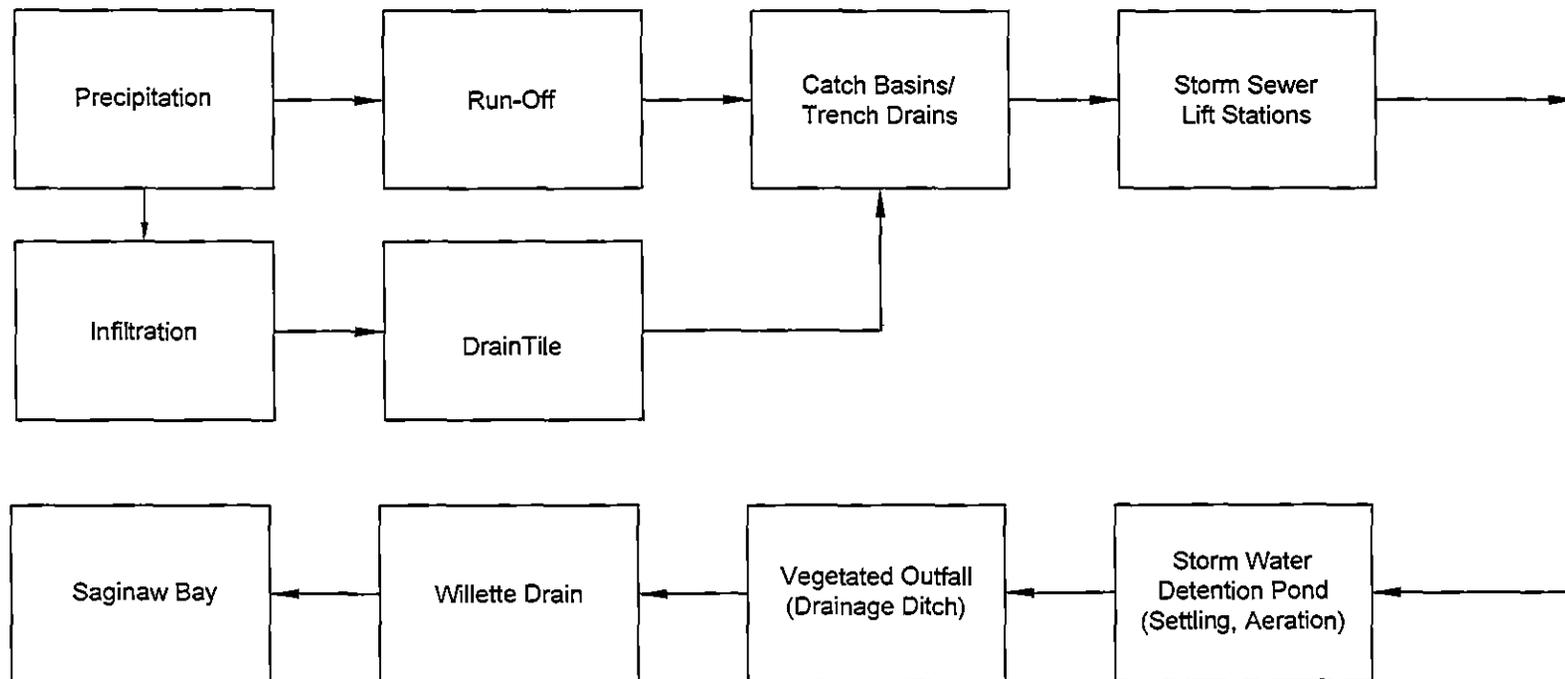
AERIAL PHOTOGRAPH SITE MAP

2606 NORTH HURON ROAD
PINCONNING, MICHIGAN
PROJECT NUMBER : 6771s

DRAWN BY: OGO
DATE: 06-05-13

FIGURE 2





ILLINOIS MICHIGAN OHIO
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STORM WATER FLOW DIAGRAM

2606 NORTH HURON ROAD
 FRASER TOWNSHIP, MICHIGAN
 PROJECT NUMBER : 6771s

DRAWN BY: OGO
 DATE: 06-05-13

FIGURE 6

Pile Location	Lift Station Main	Lift Station Main	M-13	M-13	M-13
Injection Date	2/20/2012	3/7/2012	3/12/2013	3/26/2013	4/16/2013
Injection Time	1400	0905	0910	0915	1731
Depth	Storm Water Lift Station	Storm Water Lift Station	Surface Water	Surface Water	Surface Water
	<0.004	<0.004			
	0.029	0.013			
	10.70	6.80	0.03	0.04	
					0.03
	2,420	1,780			
	1.19	0.49	0.10	0.04	0.04
	see footnote	4,032	124	632	112
	108	44	14	8	8
	2	<1			
	62	5.5	23	2	
					2
	976	736			
	1.97	2.92	4.27	see footnote	3.62
	16	23.2		see footnote	34.3
	8.238	6.498	0.257	1.654	0.449
	-81.3	-78.2	45.3	98.2	125.4
	42	27.8	63.7	16.3	9.34
	4.82	4.46	0.00	1.13	16.63
	Clear	Clear	Clear	Clear	Clear
			None	None	None
	8.12	7.78	7.4	7.45	7.58
	0.00	0.00	0.25	0.00	0.70
	On	On	On	Off	On
	1			2	

Summary of Dissolved Oxygen Analytical Results
 2506 N Huron
 Pinconning, Michigan
 AKT Peerless Project No. 06771s

Analytical Results for Dissolved Oxygen, (mg/L) (Field)

2013 Draft NPDES Criteria Rev. 9-26-2013		
	Monthly	Daily
Dissolved oxygen, mg/L (DO):	-	6.0 Min.

Sample Location	1/16	1/15	1/8	1/6	1/5	7/5	8/4	8/5	9/27	6/7
Ditch Sample Outfall #001										
Ditch Newberg		5.05	0.96	0.52	2.72	3.51	3.35	see footnote 1	7.27	
DS (Newberg)	2.1									
DS-2 (beyond Newberg)		1.29	0.33	0.39	2.46	3.93				
Johnson Drain	3.49									
Upstream Newberg			1.41	3.75			4.3	see footnote 1	10.75	
Storm Water Pond		0.53		3.34			3.49		3.00	
Newberg @ Tower Beach Road						5.76				
Bay Sample						7.38				
SW Lift Station Main							1.97	2.92		
M-13							4.21	see footnote 1	3.62	

Sample Location	6/29	1/15	2/6	3/2
Ditch Sample Outfall #001				

Footnotes:
 2) Meter malfunction

Analytical Results for Ammonia (mg/L)

2013 Draft NPDES Criteria Rev. 9-26-2013		
	Monthly	Daily
Ammonia (mg/L):		
May-November (5 - 11)	0.5	2
December-March (12 - 3)	5.5	-
April (4)	-	5.2

Location	3:10	6:50	7:30	4:50	2:23	7:30	2:7	8:4	2:53	6:8	11:8
Ditch Sample Outfall #001											
Ditch Newberg		7.10	10.80	4.60	2.01		1.9	7	1.17		
DS (Newberg)	0.05										
DS-2 (beyond Newberg)		14.90	7.20	4.50	1.20						
Johnson Drain											
Upstream Newberg							0.2	0.11	0.04		
Storm Water Pond						6.6	7.7				
Newberg @ Tower											
Beach Road						0.54					
Bay Sample						0.07					
SW Lift Station Main							10.7	6.6			
M-16							0.06	0.04	0.16		
Ditch Sample Outfall #001	4.1	0.31	1.13	2.2							

Analytical Results for Total Dissolved Solids (TDS) mg/L

2013 Draft NPDES Criteria Rev. 9-26-2013		
	Monthly	Daily
TDS, (mg/L):	(report)	(report)

Location	10/15/13	11/15/13	12/15/13	1/15/14	2/15/14	3/15/14	4/15/14	5/15/14	6/15/14	7/15/14	8/15/14	9/15/14	10/15/14	11/15/14	12/15/14
Ditch Sample															
Outfall #001	3,378	1,833	4,156	1,240	1,056	476	4,170	3,184	6,524	1,444					
Ditch Newberg		1,040	3,636	1,216											
DS (Newberg)															
DS-2 (beyond Newberg)															
Johnson Drain															
Upstream Newberg		252	356	284											
Storm Water Pond	4,150	4,974													
Newberg @ Tower															
Beach Road															
Bay Sample															
SW Lift Station Main		4,032													
M-13		124	622	342											

Analytical Results for Carbonaceous Biochemical Oxygen Demand (CBODs) mg/L

2013 Draft NPDES Criteria Rev. 9-26-2013		
CBOD (mg/L):	Monthly	Daily
May-November (5 - 11)	4	10
December-March (12 - 3)	-	36
April (4)	-	19

	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	01/2014	02/2014	03/2014	04/2014
Ditch Sample Outfall #001	14	33	15	120	35	62	5	4	4	4	4	4
Ditch Newberg	195	147	17	84		32	3	4				
DS (Newberg)												
DS-2 (beyond Newberg)	252	120	18	49								
Johnson Drain												
Upstream Newberg						35	1	2				
Storm Water Pond					52.5	104						
Newberg @ Tower												
Beach Road				10								
Bay Sample				10								
SW Lift Station Main						62	5.5					
M-13						23	2	2				
Ditch Sample Outfall #001	3	45	23	77								