

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Implementation of
Corrective Action for a Hazardous Waste
Management Facility, pursuant to Article 27,
Titles 9 and 13 of the Environmental Conservation
Law of the State of New York by:

ORDER ON CONSENT
File No. 05-32

Tecumseh Redevelopment, Inc.

Respondent

WHEREAS:

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of the Environmental Conservation Law of the State of New York ("ECL"). This Order is issued pursuant to the Department's authority under that law, including ECL 3-0301, ECL Article 27, Title 9, and ECL Article 71, Title 27.

2. Tecumseh Redevelopment, Inc. ("Respondent") owns and operates property located along the west side of Route 5, Lackawanna, New York ("Facility"), a portion of which will be the subject of this Order.

3. Respondent's predecessor in interest at the Facility, Bethlehem Steel Corporation ("Bethlehem"), conducted operations that subject the Facility to ECL Article 27, Title 9, and the 6 NYCRR regulations promulgated pursuant thereto. The Facility is a hazardous waste management facility, as that term is defined at 6 NYCRR 370.2(b)(89), and is subject to the New York State laws and regulations governing hazardous waste.

4. Bethlehem filed for protection under the United States Bankruptcy Code and Respondent acquired the Facility following a purchase pursuant to an Asset Purchase Agreement that was approved by the United States Bankruptcy Court for the Southern District of New York on April 23, 2003 (Case No. 01-15288 (Jointly Administered)).

Respondent thereafter assumed the related cleanup obligations.

5. The Department has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution pursuant to ECL 3-0301(1)(i).

6. The Department maintains that the Facility is subject to interim status and corrective action pursuant to the Federal Resource Conservation and Recovery Act ("RCRA") and the regulations promulgated thereunder.

7. On November 18, 1980, a Part A hazardous waste application under the RCRA was submitted to the United States Environmental Protection Agency ("EPA") by Bethlehem.

8. The Department received final delegation of RCRA authority from EPA as of May 29, 1986. The Facility has not received a Part B permit and is considered an interim status facility for purposes of 6 NYCRR 373-1.3.

9. Pursuant to ECL 71-2727(3)(b), whenever on the basis of any information the Commissioner determines that there is or has been a release of hazardous waste or constituents into the environment from a facility which has or has had interim status but which did not receive a final status permit, the Commissioner may issue an order requiring corrective action.

10. Respondent consents to the issuance of this Order to fulfill part of its obligation under ECL Article 27, Title 9 and ECL 71-2727(3)(b) to perform corrective action at the Facility. The Department intends to issue a final order(s) relative to the performance of corrective action at the entire Facility.

11. The Department and Respondent agree that the goal of this Order is for Respondent to implement the plans for "On-Site Treatment and Discharge of Accumulated

Precipitation from former Primary Cooler Wash Oil Tank Containment Dikes and 5MG Storage Tanks" as set forth in letters dated August 11, 2005 and September 21, 2005 prepared by TurnKey Environmental Restoration LLC on behalf of Respondent, as and approved by the Department in a letter dated November 17, 2005.

12. Respondent consents to the issuance and entry of this Order and agrees to be bound by its terms. Respondent reserves all rights and defenses it may have regarding liability or responsibility for conditions at the Facility, except that Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to enforce this Order, except as provided in Section VI, and agrees not to contest the validity of this Order or its terms. Respondent has consented to the issuance of this Order in good faith without trial or adjudication of any issue of fact or law.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Corrective Action

A. Respondent shall implement the plans for "On-Site Treatment and Discharge of Accumulated Precipitation from former Primary Cooler Wash Oil Tank Containment Dikes and 5MG Storage Tanks" as set forth in letters dated August 11, 2005 and September 21, 2005 prepared by TurnKey Environmental Restoration LLC, and approved by the Department a letter dated November 17, 2005, which are attached to this Order as Schedule A, and with the effluent limitations set forth in Schedule B, both Schedules incorporated herein, in accordance with their terms. Nothing in this Order shall be construed to require Respondent to conduct any work, or to take any action, other than as set forth in Schedules A and B.

II. Enforcement and Force Majeure

Respondent shall neither suffer any penalty under this Order nor be subject to any proceeding or action, and shall not be deemed to be in violation of this Order, if it cannot comply with any requirement of this Order because of the action of a national, state, or local government body or court, an act of God, war, strike, riot, catastrophe, fire, or any other fact or circumstance beyond Respondent's reasonable control (a "Force Majeure Event"). Respondent shall, within 15 days of when it obtains knowledge that a Force Majeure Event will prevent or delay compliance with this Order, notify the Department in writing. Failure to give such notice within the 15 day period constitutes a waiver of any claim that Respondent's failure to comply is attributable to a Force Majeure Event. Written notification shall be sent to the Regional Hazardous Materials Engineer and the Director, Bureau of Hazardous Waste and Radiation Management at the respective addresses provided in Paragraph IX. Respondent shall include in such notice, to the extent known at the time, the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Respondent shall have the burden of demonstrating by a preponderance of the evidence that a force majeure event has occurred and, consequently, is a defense to compliance with this Order. The Department shall not unreasonably deny or delay such approval.

III. Stipulated Penalties

A. Respondent's failure to comply with any term of this Order, constitutes a violation of this Order and the ECL. If Department staff determines that Respondent has failed to comply with this Order, the Department staff shall notify Respondent in writing. Payment of any penalty shall not in any way alter Respondent's obligation to comply with any term of this Order or to complete performance under the terms of this Order. The

payment of stipulated penalties as set forth below shall not limit the Department's right to seek such other relief as may be authorized by law.

B. If Respondent fails to comply with the activities described in Schedules A and B, then Respondent shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day or part thereof that Respondent is in violation of any term or condition of this Order. All penalties begin to accrue on the first day Respondent is in violation of a term or condition of this Order and continue to accrue through the final day of correction of any violation. Unless disputed as set forth below, such sums shall be due and payable within fifteen days after receipt of notification from the Department assessing the penalties. If such payment is not received within fifteen days after Respondent receives such notification from the Department, interest shall be payable at the rate specified by the New York Civil Practice Law and Rules for interest on a judgment on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by check or money order made payable to "New York State Department of Environmental Conservation" and shall be delivered personally or by certified mail, return receipt requested, to Regional Attorney, N.Y.S.D.E.C., 270 Michigan Avenue, Buffalo, NY 14203-2999. Payment of the penalties shall not in any way alter Respondent's obligation to complete performance under the terms of this Order. The payment of stipulated penalties as set forth above shall not limit the Department's right to seek such other relief as may be authorized by law. Stipulated penalties shall be due and payable according to the following schedule:

<u>PERIOD OF NONCOMPLIANCE</u>	<u>PENALTY PER DAY</u>
1st day through 15th day	\$ 250

16th day through 30th day	\$ 1,000
31st day and each day thereafter	\$ 5,000

IV. Submissions

A. All reports and submissions required by this Order shall be made to the Regional Water Engineer, Regional Hazardous Materials Engineer and the Director, Bureau of Hazardous Waste and Radiation Management at the respective addresses provided in Paragraph IX. Respondent shall be responsible for the content of any submissions made pursuant to this Order.

B. The Department shall review each of the submissions Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submission was done, in accordance with Schedules A and B and this Order and with generally accepted technical/scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of each submission. All Department-approved submissions shall be incorporated into and become an enforceable part of this Order. Approval by the Department shall not be unreasonably withheld or delayed by the Department.

C. If the Department disapproves a submission, it shall so notify Respondent in writing and specify the reasons for its disapproval. Within sixty days, unless the notice specifies a different deadline, after receiving written notice that Respondent's submission has been disapproved, Respondent shall make a revised submission to the Department that addresses all of the Department's stated reasons for disapproving the first submission. After receipt of the revised submission, the Department shall notify Respondent in writing of its approval or disapproval. If the Department approves the revised submission, it shall

be incorporated into and become an enforceable part of this Order. If the Department disapproves the revised submission, the Department and Respondent will conduct good faith negotiations to resolve the issues between them during the course of the next twenty-one days. If the issues are not resolved to the Department's satisfaction, the Department shall so notify Respondent in writing within such twenty-one day period and Respondent shall be in violation of this Order, unless it has invoked the dispute resolution mechanism set forth below in Paragraph VI within thirty days of receipt of the Department's written notice that issues have not been resolved.

D. Respondent shall modify and/or amplify and expand a submission upon the Department's direction to do so if the Department reasonably determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

V. Reservations of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities including, but not limited to nor exemplified by, the right to recover natural resource damages against any party, including Respondent and Respondent's defenses thereto.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or the Commissioner's designee from exercising any summary abatement powers pursuant to ECL 71-0301.

C. Except as specifically set forth herein, nothing in this Order shall be construed as a waiver by Respondent of any rights, claims, defenses, or agreements it now

has or may have in the future regarding the Facility.

VI. Dispute Resolution

A. The Parties shall use their reasonable best effort and negotiate in good faith to resolve any disputes regarding this Order.

B. If any dispute shall arise between Respondent and the Department regarding the implementation or interpretation of any provision of this Order or any revised submittal, Respondent may invoke the dispute resolution procedures contained in this Section.

C. In order to invoke these procedures, within 30 days of receipt of notice of the Department's action or determination, Respondent must submit a written request to meet with the Director of the Division of Solid and Hazardous Materials ("the Director") to discuss the Department's action or determination. The Director or the Director's designated agent must contact Respondent to schedule a meeting within 14 days thereafter. At the meeting, Respondent shall be given an opportunity to present its response to the Department's action or determination, and the Director shall have the authority to modify and/or withdraw such action or determination. The Director shall notify Respondent, in writing, of his specific comments as soon as reasonably practicable after the meeting.

D. Upon receipt of such notification, Respondent shall take whatever action is required under this Order in accordance with the Director's comments and pursuant to a schedule determined during the meeting with the Director. If Respondent fails to take the required action, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law.

E. The invocation of dispute resolution procedures under this Paragraph shall

not, of itself, extend, postpone, or affect in any way any obligation of Respondent under this Order, except that payment of stipulated penalties with respect to the disputed matter shall be stayed pending resolution of the dispute pursuant to this Paragraph. Notwithstanding the stay of payment set forth above, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Order. In the event Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Paragraph III above. The Director, in his sole discretion, may waive stipulated penalties when Respondent does not prevail on the disputed issue if the Director determines that Respondent had a reasonable basis for believing it would prevail on the disputed issue.

C. The Director's written specific comments shall be the Department's final decision. Nothing in this Order shall diminish or otherwise affect Respondent's statutory rights of appeal with respect to the Department's final decision.

VII. Entry Upon the Facility

Respondent hereby consents to the entry upon the Facility and upon areas in the vicinity of the Facility that are under the control of Respondent upon reasonable notice and at times reasonable under the circumstances by any duly designated employee, consultant, contractor, or agent of the Department or any State Agency having jurisdiction for purposes of inspection, sampling, and testing to ensure Respondent's compliance with this Order. The Department shall abide by the health and safety rules in effect at the Facility. The Department may be accompanied by an employee, consultant, contractor, or agent of Respondent. Upon request, Respondent shall provide the Department with reasonably suitable office space at or near the Facility, including access to a telephone,

and shall permit the Department full access to all non-privileged records relating to matters addressed by this Order and to job meetings held in connection with the work performed under this Order.

VIII. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and its representatives and employees harmless for all claims, suits, actions for damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent or its directors, officers, employees, servants, agents, successors, and assigns.

IX. Modification

A. The terms of this Order constitute the complete and entire Order the Department issued to Respondent covering implementation of the activities described in Schedules A and B for On-Site Treatment and Discharge of Accumulated Precipitation from former Primary Cooler Wash Oil Tank Containment Dikes and 5MG Storage Tanks. No term, condition, understanding, or Order purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submissions shall be construed as relieving Respondent of its obligation to obtain such formal approvals as may be required by this Order.

B. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application to the Department setting forth reasonable grounds for the relief sought. Copies of such written application shall be

delivered or mailed to the Regional Hazardous Materials Engineer, the Regional Attorney, and the Director, Bureau of Hazardous Waste and Radiation Management, of the New York State Department of Environmental Conservation at the respective addresses provided in Paragraph X.

X. Communications

All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or by hand delivery.

1. Communication from Respondent shall be sent to:

Regional Hazardous Materials Engineer
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

Regional Water Engineer
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

Director, Bureau of Hazardous Waste and Radiation Management
Division of Solid and Hazardous Materials
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7258

Regional Attorney
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

2. Communications to Respondent shall be sent to:

Mr. Keith A. Nagel
General Manager
4020 Kinross Lakes Parkway
Richfield, Ohio 44286

and to

Mr. Paul H. Werthman
TurnKey Environmental Restoration, LLC
726 Exchange Street, Suite 624
Buffalo, New York 14210

and to

Mr. Dale E. Papajcik
Squire, Sanders & Dempsey L.L.P.
4900 Key Tower
127 Public Square
Cleveland, Ohio 44114

B. The Department and Respondent reserve the right to designate additional or different addresses for communication on written notice to the other given in accordance with this Section.

XI. Termination and Satisfaction

Respondent's obligations under this Order shall be deemed satisfied and shall terminate upon their own terms upon Respondent's completion of the activities described in Schedules A and B and the payment of any Stipulated Penalties due pursuant to Section III.

XII. Miscellaneous

A. Respondent hereby certifies that it has fully and accurately disclosed or made available to the Department all relevant information known to Respondent and all relevant information known to be in the possession or control of its officers, directors, employees, contractors, and agents that relates to, identifies or describes on-site treatment and discharge of accumulated.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to

the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within fifteen days after the effective date of this Order or their selection by Respondent, whichever is later. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. Such approval shall not unreasonably be withheld, and shall be deemed granted if Respondent has not received from the Department a written notice of disapproval within fifteen days. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent pursuant to this Order, and the Department also shall have the right to take its own samples. Respondent shall make available to the Department the results of all sampling, tests or other data generated by Respondent with respect to implementation of this Order or conducted independently by Respondent. Respondent shall have the right to obtain split samples, duplicate samples, or both of all substances and materials sampled by the Department, and the Department shall promptly make available to Respondent the results of all sampling, tests or other data generated by the Department with respect to this Order.

D. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform its obligations under this Order.

E. Respondent, Respondent's successors (including successors-in-title) and assigns shall be bound by this Order. Any change in ownership or corporate status of

Respondent including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Respondent's responsibilities under this Order. Respondent shall require that its employees, servants, and agents comply with the relevant provision of this Order in the performance of their designated duties on behalf of Respondent.

F. Respondent shall be responsible for ensuring that its contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

G. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

H. All references to days in this Order are to calendar days unless otherwise specified. If a deadline falls on a weekend or holiday, such deadline shall automatically be extended until the next business day.

I. The Paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

J. The effective date of this Order shall be the date that the Commissioner or her designee serves a fully executed copy of this Order upon Respondent. The Department will provide Respondent (or Respondent's counsel) with a fully executed copy of this Order as soon as practicable after the Commissioner or her designee signs it.

K. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

Dated: *March 14*, 2006
Buffalo, New York

DENISE M. SHEEHAN,
COMMISSIONER
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION


By: Abby M. Snyder
Acting Regional Director

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives its right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: Keith A. Nagel
Keith A. Nagel

Title: Director, Environmental, Environmental Affairs

Date: February 23, 2006

STATE OF OHIO)
)
COUNTY OF CUYAHOGA)

On the 23rd day of February, in the year 2006, before me, the undersigned, Keith A. Nagel, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Sue E. Heister
NOTARY PUBLIC

SUE E. HEISTER
Notary Public, State of Ohio
My Commission Expires 10/27/2007



SCHEDULE A

(TurnKey Letters dated August 11, 2005 and Sept. 21, 2005;
Department Approval Letter)



August 11, 2005

Mr. Bruce D. Wager
Environmental Engineer 1
Division of Water
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203

Re: Tecumseh Redevelopment, Inc. – Request for Approval of On-Site Treatment
and Discharge of Accumulated Precipitation from former Primary Cooler
Wash Oil Tank Containment Dikes and 5MG Storage Tank
REVISED AUGUST 2005

Dear Mr. Wager:

As requested, we have prepared this letter to revisit the proposed on-site treatment and discharge of accumulated contaminated water at the Tecumseh Redevelopment Site (former Bethlehem Steel property). We are requesting that the Department take the necessary steps to approve the treatment and discharge as a short-term on-site remediation project based on the proposed treatment process, discharge location and sampling plan presented below. As discussed, we propose to set-up and run the treatment system at a single location near the 5 Million Gallon tank (just north of Smokes Creek) and transfer the water from the Coke Plant Wash Oil dikes into the 5 MG tank as space becomes available.

Our proposed approach for treatment and discharge of the approximately 500,000 gallons of impacted water from the 5 MG tank has been modified from our earlier proposals to significantly enhance BOD and ammonia removal to meet proposed NYSDEC water quality objectives. In order to facilitate and enhance the flexibility and reliability of the proposed treatment system, we have already installed electrical service to the tank area which will allow 24-hour operation of the system, if necessary.

The revised treatment approach is presented below.

I. TREATMENT SYSTEM

TurnKey will install two surface aerators in the 5 MG tank rated at 650 gpm each. Prior to initiating aeration, the tank will be seeded with bacteria (from an acclimated activated sludge source). The aerators will be run continuously in the tank to promote biological degradation of the BOD and ammonia in the wastewater. Initially, it is anticipated that

the tank contents will be aerated continuously for approximately two weeks. At the end of this initial treatment cycle, a composite sample will be analyzed to the effectiveness of BOD and ammonia treatment/reduction. If results indicate that significant reductions in concentrations are being achieved (i.e., greater than 50 percent of initial concentration), aeration will continue until concentrations of BOD and ammonia are at or below 30 mg/L and 20 mg/L, respectively.

If no significant reductions are observed, modifications to the treatment process will be implemented, including: reseeded the tank; increasing the rate of aeration; operating the tank in a sequencing batch reactor mode (aerobic/anoxic cycling); or other potential operating modes. If the in-tank treatment approach proves to be ineffective, the on-site treatment and discharge approach will be reevaluated and off-site treatment of the wastewater will be considered.

Assuming that effective treatment of BOD and ammonia can be performed in the tank and the analysis of the treated water meets the treatment goals for BOD and ammonia, the water will be pumped at a flow rate of 25 to 30 gallons per minute from the 5 MG tank through a bag filter system for solids and tramp oil removal. A 20-micron, oleophilic filter bag media will be employed. The suction line will be located near the surface of the water to minimize the disturbance and potential uptake of settled solids from the bottom. Floating booms and/or sorbent pads within the 5 MG storage tank will also be employed to capture floating oil near the treatment intake.

The filtered water will then be pumped through a 1,000 lb activated carbon (8 x 30 mesh coal-based activated carbon) treatment vessel. Two carbon vessels will be employed to allow for routine switchover and off-line change-out of spent carbon as determined by the effluent sampling program. Based on predicted loading, the carbon supplier has estimated that we will require a total of approximately 4,000 lbs of carbon to treat 500,000 gallons. Based on this usage rate, it is estimated that one carbon change out per vessel will be required during the treatment project.

Effluent from the carbon treatment system will be pumped into an open-top tank holding tank. This tank will be used equalize flow and allow for post-treatment aeration, if necessary, and effluent sampling.

The treated water will be pumped to a discharge point approximately 800 feet south of the 5 MG tank into Smokes Creek, unless the Department indicates a preferred alternative discharge location.

The system will normally operate 24 hours per day, 5 days per week. We anticipate that the treatment of approximately 500,000 gallons (at an average flow rate of 25 gpm) will require approximately two to three months to complete (depending on the time required

for in-tank biological treatment, weather and unforeseen operational issues). In order to complete the proposed treatment prior to the onset of winter weather, we are proposing to initiate treatment at the beginning of September 2005.

II. - PROPOSED EFFLUENT SAMPLING PLAN

Upon successful pretreatment of the BOD and ammonia in the 5 MG tank (composite samples to be collected from the tank itself prior to initiating activated carbon treatment and discharge (refer to discussion Item I), we propose to perform effluent sampling for the treated water at the start-up and subsequently at the following frequency:

Sample Frequency	Parameter	Method
Start-up & Monthly	VOCs	8260
Start-up & Monthly	SVOCs	8270
Weekly	TOC	415
Weekly	Ammonia	350.1
Weekly	Oil & Grease	1664
Weekly	pH	150.1

Grab samples will be collected from a sample tap located on the discharge of the equalization tank. At start-up and for the first weekly sample event, a 24-hour sample analysis turn-around will be requested to allow rapid assessment of performance and adjustments as needed. This data will be shared with the Department as it is received.

Based on our discussions, we understand that the Department is planning to issue a temporary approval to treat and discharge the impacted water to the ground. We would request that this approval be granted for a six month period beginning in September of this year to allow for flexibility if weather, equipment or treatment issues are encountered. We also understand that this approval will be made without a SPDES permit under a proposed RCRA interim corrective measures (ICM) consent order. If this is not feasible based on Department review, then we will pursue an application for a SPDES discharge permit for the treated effluent. Therefore, we would appreciate the Department's expeditious review of this request so that the treatment process can be initiated as soon as feasible.

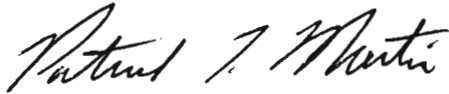


Mr. Bruce Wager
New York State Dept. of Environmental Conservation

August 11, 2005
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We trust that the information presented above is sufficient for the Department to proceed with granting approval for this work and appreciate your review and consideration of this request. If you require additional information or wish to discuss this matter further, please contact me at (716) 856-0635.

Sincerely,
TurnKey Environmental Restoration, LLC



Patrick T. Martin, P.E., DEE
Project Manager

C: Stan Radon, NYSDEC
Maureen Brady, NYSDEC
Keith Nagel, Tecumseh Redevelopment
Paul Werthman, TurnKey
File: 0071-002-800, CG





September 21, 2005

Mr. Bruce D. Wager
Environmental Engineer 1
Division of Water
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203

Re: Tecumseh Redevelopment, Inc. – Request for Treatment of Wastewater in 5 MG Storage Tank

Dear Mr. Wager:

Based on our phone conversation of September 6, 2005, we have prepared this letter to provide the supplemental information the Department has requested regarding our proposed treatment and discharge of accumulated wastewaters in the 5 million gallon storage tank at the Tecumseh Redevelopment site (formerly Bethlehem Steel) in Lackawanna, New York.

Specifically, we have compiled the following information for your review and consideration:

- **Supplemental Analytical Data:** In accordance with the Department's request, TurnKey collected a grab sample on September 12, 2005 for analysis of priority pollutant metals (plus iron), pesticides and PCBs, and total cyanide. Table 1 summarizes the results and compares them with DEC GA Water Quality Standards. A copy of the analytical report is also provided in Attachment 1 of this correspondence.
- **Treatment System Approach:** We have prepared a technical memorandum (Attachment 2) to summarize the proposed treatment approach, demonstrating that the approach has sound technical basis and has been thoroughly evaluated.
- **Site Plan (w/Proposed Discharge Location):** As discussed, our preferred discharge option from the treatment system is to grade. We have prepared a Site map (Figure 1) showing the proposed location of the treatment system and discharge area (with coordinates). The proposed discharge area is to the northeast of the 5 MG tank and outside of any of the identified solid waste management units (SWMU P-74, also shown on the figure) as requested by Mr. Radon. Per our discussion, we intend to terminate the discharge line in an infiltration trench that

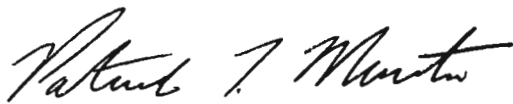
will be excavated approximately 1^{1/2} feet deep and 10 feet long into the slag fill located in the area.

- **Effluent Treatment Goals for VOCs and SVOCs:** The Department has expressed concern with regard to the final concentrations of VOCs and SVOCs in the treated effluent based on earlier projections provided by TurnKey in an April 19, 2005 fax. Based on the proposed revised treatment approach (Attachment 2), enhanced biological degradation will increase removal of these compounds within the 5 MG tank. Any remaining contaminants will then be polished with activated carbon and we are very confident that the effluent concentrations of all VOCs and SVOCs will be below the Class GA groundwater standards that the Department has requested we meet. If the Department would prefer, we propose an initial demonstration to treat approx. 1,000 gallons that will then be collected in the effluent holding tank prior to discharge. TurnKey will collect a sample of the treated effluent from the holding tank prior to discharge and analyze for VOCs and SVOCs to demonstrate that the limits have been met.

At this time we are urging the Department to expeditiously review this supplemental information and provide approval to treat the water and discharge it to the ground at a maximum flow rate of 30 gpm. Our preference would be to complete the treatment prior to the onset of winter.

We appreciate your timely review and consideration of this request. If you have any questions concerning this information or wish to discuss this matter further, please contact me at (716) 856-0635.

Sincerely,
TurnKey Environmental Restoration, LLC



Patrick T. Martin, P.E., DEE
Project Manager

C: Stan Radon, NYSDEC
Keith Nagel, Tecumseh Redevelopment

File: 0071-002-800, CG



TABLE 1
SUPPLEMENTAL ANALYTICAL DATA - 5 MG WASH OIL TANK

Tecumseh Redevelopment, Inc.
Lackawanna, New York

PARAMETER	5 Million Gallon Tank	NYSDEC GA WATER QUALITY STANDARDS
Metals (ug/L)		
Mercury	0.772	0.7
Antimony	ND	3
Arsenic	46	25
Beryllium	ND	3*
Cadmium	ND	5
Chromium	10	50
Copper	ND	200
Iron	1200	300
Lead	5.4	25
Nickel	17	100
Selenium	160	10
Silver	ND	50
Thallium	ND	0.5*
Zinc	37	2000*
Wet Chemistry (mg/L)		
Cyanide	1.0	0.2
Pesticides and PCBs (ug/L)		
Aldrin	0.52	ND
alpha-BHC	ND	
beta-BHC	ND	
gamma-BHC (Lindane)	ND	
delta-BHC	ND	
Chlordane	ND	0.05
4,4' - DDD	ND	0.3
4,4' - DDE	ND	0.2
4,4' - DDT	ND	0.2
Dieldrin	ND	0.004
Endosulfan I	ND	
Endosulfan II	ND	
Endosulfan sulfate	ND	
Endrin	ND	ND
Endrin aldehyde	ND	5
Heptachlor	ND	0.04
Heptachlor epoxide	ND	0.03
Toxaphene	ND	0.06
Aroclor 1016	ND	
Aroclor 1221	ND	
Aroclor 1232	ND	
Aroclor 1242	ND	
Aroclor 1248	ND	
Aroclor 1254	ND	
Aroclor 1260	ND	

Note:

1. Guidance Value (denoted with *) used when GA water quality standard not available from NYSDEC
2. Shaded values indicate exceedance of water quality parameter

ATTACHMENT 1

SEVERN TRENT LABORATORIES, INC.
SUPPLEMENTAL ANALYTICAL DATA
SEPTEMBER 21, 2005

ANALYTICAL REPORT

PROJECT NO. NY3A9073

NY3A9073

Lot #: A5I130288

Brian J. Fischer

**STL Buffalo
10 Hazelwood Drive
Amherst, NY 14228**

SEVERN TRENT LABORATORIES, INC.

**Lois D. Ezzo
Project Manager**

September 16, 2005

STL BUFFALO

Client Sample ID: 5 GM TANK

TOTAL Metals

Lot-Sample #....: A5I130288-001

Matrix.....: WG

Date Sampled....: 09/12/05 09:15 Date Received...: 09/13/05

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 5256423						
Mercury	772	25.0	ng/L	CFR136A 1631E	09/13-09/14/05	HKFRN1AA
		Dilution Factor: 50				

METHOD BLANK REPORT

TOTAL Metals

Client Lot #: A5I130288

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5I130000-423 Prep Batch #: 5256423						
Mercury	ND	0.50	ng/L	CFR136A 1631E	09/13-09/14/05	HKFNC1AA
Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #....: A5I130288

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP- BATCH #
Mercury	91	(77 - 125)		CFR136A 1631E	09/13-09/14/05	5256423
	93	(77 - 125)	1.9 (0-18)	CFR136A 1631E	09/13-09/14/05	5256423

Dilution Factor: 1

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Date: 09/16/2005
Time: 10:47:39

TURNKEY - BETHLEHEM STEEL SITE
Tecumseh Site - Discharge Monitoring
PRIORITY POLLUTANT METALS (-HG/+FE)

Rept: ANT246

Client ID Job No Sample Date	Lab ID	5 MG TANK A05-9901 09/12/2005	A5990101	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Animony - Total				0.020	NA		NA		NA
Arsenic - Total				0.010	NA		NA		NA
Beryllium - Total				0.0020	NA		NA		NA
Cadmium - Total				0.0010	NA		NA		NA
Chromium - Total				0.0040	NA		NA		NA
Copper - Total				0.010	NA		NA		NA
Iron - Total				0.050	NA		NA		NA
Lead - Total				0.0050	NA		NA		NA
Nickel - Total				0.010	NA		NA		NA
Selenium - Total				0.015	NA		NA		NA
Silver - Total				0.0030	NA		NA		NA
Thallium - Total				0.020	NA		NA		NA
Zinc - Total				0.020	NA		NA		NA

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	5 MG TANK A05-9901 09/12/2005		A5990101					
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Cyanide - Total			MG/L	1.0	0.050	NA		NA	

Date: 09/16/2005
Time: 10:46:57

TURNKEY - BETHLEHEM STEEL SITE
Tecumseh Site - Discharge Monitoring
METHOD 608 - PRIORITY POLLUTANT PESTICIDES/PCBS

Rept: AN1246

Client ID Job No Sample Date	Lab ID	5 MG TANK A05-9901 09/12/2005	A5990101	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Aldrin	UG/L	0.52	0.25	NA		NA		NA		NA	
alpha-BHC	UG/L	ND	0.25	NA		NA		NA		NA	
beta-BHC	UG/L	ND	0.25	NA		NA		NA		NA	
gamma-BHC (Lindane)	UG/L	ND	0.25	NA		NA		NA		NA	
delta-BHC	UG/L	ND	0.25	NA		NA		NA		NA	
Chlordane	UG/L	ND	2.5	NA		NA		NA		NA	
4,4'-DDD	UG/L	ND	0.25	NA		NA		NA		NA	
4,4'-DDE	UG/L	ND	0.25	NA		NA		NA		NA	
4,4'-DDT	UG/L	ND	0.25	NA		NA		NA		NA	
Dieldrin	UG/L	ND	0.25	NA		NA		NA		NA	
Endosulfan I	UG/L	ND	0.25	NA		NA		NA		NA	
Endosulfan II	UG/L	ND	0.25	NA		NA		NA		NA	
Endosulfan sulfate	UG/L	ND	0.25	NA		NA		NA		NA	
Endrin	UG/L	ND	0.25	NA		NA		NA		NA	
Endrin aldehyde	UG/L	ND	0.25	NA		NA		NA		NA	
Heptachlor	UG/L	ND	0.25	NA		NA		NA		NA	
Heptachlor epoxide	UG/L	ND	0.25	NA		NA		NA		NA	
Toxaphene	UG/L	ND	5.0	NA		NA		NA		NA	
Aroclor 1016	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1221	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1232	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1242	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1248	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1254	UG/L	ND	2.5	NA		NA		NA		NA	
Aroclor 1260	UG/L	ND	2.5	NA		NA		NA		NA	
SURROGATE(S)											
Tetrachloro-m-xylene	%	0.0	22-119	NA		NA		NA		NA	
Decachlorobiphenyl	%	0.0	30-135	NA		NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

ATTACHMENT 2

**5 MG TREATMENT OPERATION MEMORANDUM
SEPTEMBER 21, 2005**



726 Exchange Street
Suite 624
Buffalo, New York 14210
p. (716) 856-0635
f. (716) 856-0583

Memorandum

To: FILE
From: Nathan T. Munley
CC: Patrick Martin
Date: 9/21/2005
Re: 5 MG Storage Tank Treatment – Tecumseh Redevelopment, Lackawanna NY Site

Approximately 350,000 gallons of collected wastewater/precipitation are currently within the 5 MG storage tank. Analytical results show elevated levels of ammonia ($\text{NH}_3\text{-N}$) and B.O.D., 1340 and 2400 mg/L respectively. In addition, volatile and semi-volatile organic compounds (VOCs and SVOCs) are present at low concentrations.

The proposed treatment plan will implement a two-stage biological process to reduce ammonia and BOD (including VOCs and SVOCs) levels utilizing the current storage tank. By utilizing two pond aerators to vigorously mix the tank waters, thereby introducing oxygen, the natural process of nitrification will be utilized to convert the current ammonia ($\text{NH}_3\text{-N}$) into nitrate ($\text{NO}_3\text{-N}$) and additionally reducing B.O.D. and pH during the nitrification process.

In the second stage of the treatment process the tank waters will be allowed to go anoxic (low/no oxygen), and the subsequent natural process of denitrification will then convert nitrate into di-nitrogen gas (N_2), a common atmospheric constituent.

Monitoring throughout the two-stage biological process will allow for the evaluation of ammonia and B.O.D. removal/conversion rates and if the proposed treatment operation is achieving the desired results. Additional microbial "seeding" of the tank may also be initiated to increase conversion rate efficiency in both the nitrification and/or denitrification stages.

With a successful reduction of ammonia and B.O.D. levels, tank waters will then be filtered to remove any oil/grease and solids. The first filter bag will be of an oil sorbing material to remove any surface oils and/or grease present. The second filter bag will be utilized to remove any solids not settled out within the tank, and protect the downstream carbon units.

The final step in the treatment process will be to remove any residual VOCs and SVOCs utilizing two 1000-lb. activated carbon units. After final polishing, effluent waters will be discharged to an at-grade infiltration trench that will be located outside of the currently designated SWMUs.

Routine sampling throughout the treatment stream will be conducted to monitor removal efficiency and demonstrate that the discharge limits are being met.

NOV 18 2005

**New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, Region 9**

270 Michigan Avenue, Buffalo, New York, 14203-2999

Phone: (716) 851-7220 • FAX: (716) 851-7226

Website: www.dec.state.ny.us



Denise M. Sheehan
Acting-Commissioner

November 17, 2005

Mr. Patrick T. Martin, P.E.
Project Manager
TurnKey Environmental Restoration, LLC
726 Exchange Street, Suite 624
Buffalo, New York 14210

Dear Mr. Martin:

Tecumseh Redevelopment, Inc.
Request for Treatment of Wastewater in 5 MG Tank

In letters dated August 11, 2005 and September 21, 2005, you proposed a treatment and discharge system for accumulated wastewater in the 5 million gallon storage tank at the Tecumseh Redevelopment site. This proposal was made due to the deteriorating condition of the tank and the potential for an uncontrolled release of the wastewater. The treatment and discharge is to be conducted under the terms of an Interim Corrective Measures Order on Consent (awaiting execution by Tecumseh and the Department).

The Department has completed review of the technical aspects of your plan and finds the proposed treatment and discharge method acceptable for meeting groundwater effluent limits. Please note that the treatment and discharge will be governed by the effluent limitations, monitoring requirements and other conditions contained in the final Interim Corrective Measures Order on Consent. Additionally, the treatment and discharge may not commence until the Interim Corrective Measures Order on Consent has been fully executed.

If you should have any questions, please contact Mr. Stanley Radon at (716)851-7220.

Sincerely,

James G. Strickland, P.E.
Regional Hazardous Materials Engineer

CC: Ms. Maureen Brady, NYSDEC
Mr. Stanley Radon, NYSDEC
Mr. Peter Grasso, NYSDEC
Mr. Bruce Wager, NYSDEC
Mr. John Weidman

SCHEDULE B

Effluent Limitations

New York State Department of Environmental Conservation



Division of Water

Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233 -3505

Phone: (518) 402-8111 · **FAX:** (518) 402-9029

Website: www.dec.state.ny.us

SUBJECT: Tecumseh Redevelopment, Inc.
Treatment and Discharge of accumulated wastewaters in 5 MG Storage Tank

DATE: October 21, 2005

In response to your request , attached please find effluent limitations and monitoring requirements for the above noted remediation discharge.

Please be advised that DER will be responsible for ensuring compliance with the attached effluent limitations and monitoring requirements, and approval of all engineering submissions. Footnote 1 identifies the appropriate DER Section Chief as the place to send all effluent results, engineering submissions, and modification requests. The Regional Water Engineer, attention to Bruce Wager, should also be kept apprised of the status of this discharge and, in accordance with the attached criteria, receive a copy of any and all effluent results.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning October 20, 2005

and lasting until June 1, 2006

the discharges from the treatment facility to GROUNDWATER, Class GA, shall be limited and monitored by the operator as specified below:

Outfall Number and Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max		Measurement Frequency	Sample Type
Outfall 001 - Treatment and Discharge of accumulated wastewaters in 5 MG Storage Tank:					
Flow	Monitor	Monitor	GPD	Continuous	Meter
pH (range)	6.5 to 8.5		SU	See Footnote 1	Grab
Oil and Grease	NA	15	mg/l	See Footnote 1	Grab
Ammonia	NA	2000	μg/l	See Footnote 1	Grab
Mercury	NA	1.4	μg/l	See Footnote 1	Grab
Arsenic	NA	50	μg/l	See Footnote 1	Grab
Iron	NA	600	μg/l	See Footnote 1	Grab
Lead	NA	50	μg/l	See Footnote 1	Grab
Selenium	NA	20	μg/l	See Footnote 1	Grab
Cyanide	NA	400	μg/l	See Footnote 1	Grab
Benzene	NA	1	μg/l	See Footnote 1	Grab
Toluene	NA	5	μg/l	See Footnote 1	Grab
Ethylbenzene	NA	5	μg/l	See Footnote 1	Grab

1,2-Xylene	NA	5	µg/l	See Footnote 1	Grab
1,3-Xylene	NA	5	µg/l	See Footnote 1	Grab
1,4-Xylene	NA	5	µg/l	See Footnote 1	Grab

Outfall Number and Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max		Measurement Frequency	Sample Type
Outfall 001 - Treatment and Discharge of accumulated wastewaters in 5 MG Storage Tank:					
Aldrin	NA	0.02 ²	µg/l	See Footnote 1	Grab
delta-BHC	NA	0.04	µg/l	See Footnote 1	Grab
Chlordane	NA	0.05	µg/l	See Footnote 1	Grab
4,4'-DDT	NA	0.2	µg/l	See Footnote 1	Grab
Dieldrin	NA	0.004	µg/l	See Footnote 1	Grab
Endrin	NA	0.02	µg/l	See Footnote 1	Grab
Heptachlor	NA	0.04	µg/l	See Footnote 1	Grab
Heptachlor epoxide	NA	0.03	µg/l	See Footnote 1	Grab
Toxaphene	NA	0.06	µg/l	See Footnote 1	Grab

Footnotes:

1. Measurement Frequency shall be once per three day (72 hour) period of operation.

2. Discharge limit is set at the Practical Quantitation Limit (PQL). Actual groundwater effluent standard/limitation is below this limit.

Additional Conditions:

- (1) Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Mr. Jim Strickland
Division of Solid and Hazardous Materials, Region 9
NYSDEC, 270 Michigan Ave, Buffalo, NY 14203

With a copy sent to:

Regional Water Engineer, Region 9
NYSDEC, 270 Michigan Ave, Buffalo, NY 14203

- (2) Only site generated wastewater is authorized for treatment and discharge.
- (3) Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 3 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.
- (4) Both concentration (mg/l or $\mu\text{g/l}$) and mass loadings (lbs/day) must be reported to the Department for all parameters except flow and pH.
- (5) Any use of corrosion/scale inhibitors, biocidal -type compounds, or other water treatment chemicals used in the treatment process must be approved by the department prior to use.
- (6) This discharge and administration of this discharge must comply with the substantive requirements of 6NYCRR Part 750.
- (7) An initial demonstration will treat approximately 1,000 gallons that will then be collected in the effluent holding tank prior to discharge. A sample of the treated effluent from the holding tank will be collected prior to discharge and analyzed for the parameters listed above to demonstrate that the limits have been met.