

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



TRANSFER OF TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT NO. WQ0004857000

EPA I.D. No. TX0131644

FROM: Waste Control Specialists LLC

TO: Waste Control Specialists LLC and Andrews County

Ownership of the facilities covered by the above-referenced permit issued July 24, 2009, has changed. That part of the signature page pertaining to the name and mailing address of the permit holder is hereby changed so that the same shall hereinafter be and read as follows:

"Waste Control Specialists LLC and Andrews County
P.O. Box 1129
Andrews, Texas 79714"

The transferee is financially responsible for the proper maintenance and operation of the facility so as to comply with the terms and conditions of the permit. The failure to operate the facility in accordance with the terms and conditions of the permit may be good cause for revocation of the permit.

This transfer is in accordance with 30 Texas Administrative Code Section 305.64.

This order is part of the permit and should be attached there to.

Issued Date: March 31, 2011

A handwritten signature in black ink, appearing to read "Mark Wiley".

For The Commission



TPDES PERMIT NO. WQ0004857000
[For TCEQ office use only -
EPA I.D. No. TX0131644]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

P.O. Box 13087

Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES

under provisions of

Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Waste Control Specialists LLC

whose mailing address is

P.O. Box 1129
Andrews, Texas 79714

is authorized to treat and discharge wastes from the Byproduct Material Disposal Facility, a facility that will receive, pretreat, and dispose of byproduct material, a type of radioactive waste as defined in Section 401.003(3)(B) of the Texas Health & Safety Code, via a landfill operated under the authority of Radioactive Material License No. R05807, (SIC 4953)

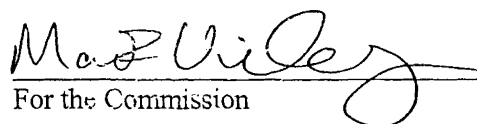
located at 9998 State Highway 176 West, approximately 1.25 miles north of the intersection of State Highway 176 with the Texas and New Mexico state line, Andrews County, Texas

via Outfalls 004 and 005 to an unnamed ditch in the State of Texas; thence to an unnamed ditch in the State of New Mexico; thence to Monument Draw in the State of New Mexico; thence to Monument Draw in the State of Texas; thence to Upper Pecos River in Segment No. 2311 of the Rio Grande Basin

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight on September 1, 2013.

ISSUED DATE: **JUL 24 2009**


For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 005

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge previously monitored effluents (PMEs; from internal Outfall 103), non-contact industrial storm water (*1), and storm water associated with construction activities (*2) at the proposed Byproduct Material Disposal Facility (BMDF) subject to the following effluent limitations:

The daily average dry weather (*3) flow of effluent shall not exceed 0.44 million gallons per day (MGD).

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average (mg/l)	Daily Maximum (mg/l)	Single Grab mg/l	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day (*4)	Estimate
Oil and Grease	N/A	15	15	1/week (*4)	Grab
Chemical Oxygen Demand (COD)	N/A	200	200	1/week (*4)	Grab

(*1) See Other Requirement No. 6.

(*2) See Other Requirement No. 7 and Storm Water Associated With Construction Activities section on Page No. 22.

(*3) See Other Requirement No. 8.

(*4) When discharge occurs during normal business hours. Normal business hours are between the hours of 7:30 a.m. and 5:00 p.m., excluding holidays.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*4) by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples shall be taken at the following location(s): At Outfall 005, at the drainage ditch exiting the west side of the facility near the north facility boundary.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 103

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge landfill wastewaters only from the Byproduct Material Disposal Unit, BMDU (*1) associated with the disposal of Fernald waste canisters only in the BMDU, at the proposed Byproduct Material Disposal Facility (BMDF) subject to the following effluent limitations (*2):

The daily average flow of effluent shall not exceed 0.44 million gallons per day (MGD).

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average (mg/l)	Daily Maximum (mg/l)	Single Grab mg/l	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day (*3)	Record
Oil and Grease	N/A	15	15	1/week (*3)	Grab
Biochemical Oxygen Demand, 5-day (BOD ₅)	42	220	220	1/month (*3)	Grab
Total Suspended Solids (TSS)	27	88	88	1/month (*3)	Grab
Ammonia Nitrogen (NH ₃ -N)	3.7	10	10	1/month (*3)	Grab
α-Terpineol	0.019	0.042	0.042	1/month (*3)	Grab
Aniline	0.015	0.024	0.024	1/month (*3)	Grab
Benzoic acid	0.073	0.119	0.119	1/month (*3)	Grab
Naphthalene	0.022	0.059	0.059	1/month (*3)	Grab
p-Cresol	0.015	0.024	0.024	1/month (*3)	Grab
Phenol	0.029	0.048	0.048	1/month (*3)	Grab
Pyridine	0.025	0.072	0.072	1/month (*3)	Grab
Arsenic, total	0.527	1.11	1.11	1/month (*3)	Grab
Chromium, total	0.46	1.1	1.1	1/month (*3)	Grab
Zinc, total	0.296	0.535	0.535	1/month (*3)	Grab
Combined Radium 226 and 228	N/A	5 pCi/l	5 pCi/l	1/month (*3)	Grab
Gross alpha-particle activity (*4)	N/A	15 pCi/l	15 pCi/l	1/month (*3)	Grab
Gross Beta/photon emitters (*5)	N/A	Report pCi/l	Report pCi/l	1/month (*3)	Grab
Uranium, total	N/A	30 µg/l	30 µg/l	1/month (*3)	Grab

(*1) See Other Requirement No. 5.

(*2) See Other Requirement Nos. 5, 12, 13 and 16.

(*3) When discharge occurs.

(*4) Excluding Uranium and Radon.

(*5) Report all values equal to or greater than 50 pCi/l.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*3) by grab sample.
3. The effluent shall contain a minimum dissolved oxygen of 2.0 mg/l and shall be monitored 1/day (*3) by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): At Outfall 103, at the contact water tank dike.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 004

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge non-contact industrial storm water (*1), and storm water associated with construction activities (*2) at the proposed BMDF subject to the following effluent limitations:

Volume: Intermittent and flow variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average (mg/l)	Daily Maximum (mg/l)	Single Grab mg/l	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day (*3)	Estimate
Oil and Grease	N/A	15	15	1/week (*3)	Grab
Chemical Oxygen Demand	N/A	200	200	1/week (*3)	Grab

(*1) See Other Requirement No. 6.

(*2) See Other Requirement No. 7 and Storm Water Associated With Construction Activities section on Page No. 22.

(*3) When discharge occurs during normal business hours. Normal business hours are between the hours of 7:30 a.m. and 5:00 p.m., excluding holidays.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day (*3) by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples shall be taken at the following location(s): At Outfall 004, at the drainage ditch exiting the west side of the facility near the south facility boundary.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) – the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month.

For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

- f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
- g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9 (b).

- b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TCW Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time, and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance.

A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

- i. Unauthorized discharges as defined in Permit Condition 2(g).
- ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

- iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
 - c. In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:
- a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
 - c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.

- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

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

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

- a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:

- a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Land Application Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC §7.302(b)(6).
 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility that reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC §335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC §335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC §335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC §335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.
12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

OTHER REQUIREMENTS

- Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 7 within 24 hours from the time the permittee becomes aware of the violation followed by a written report within five working days to Texas Commission on Environmental Quality (TCEQ) Region 7 and the Enforcement Division (MC 224).

Test methods utilized shall be sensitive enough to demonstrate compliance with the permit effluent limitations. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit with consideration given to the minimum analytical level (MAL) for the parameters specified below.

<u>POLLUTANT</u>	<u>MAL (ug/l)</u>	<u>POLLUTANT</u>	<u>MAL (ug/l)</u>
α -Terpineol	15	Gross alpha particle activity	
Aniline	10	(in picoCuries per liter pCi/l)	3 pCi/l
Benzoic acid	10	Gross Beta/photon emitters	3 pCi/l
Naphthalene	10	Radium 226	1 pCi/l
<i>p</i> -Cresol	10	Radium 228	1 pCi/l
Phenol	10	Uranium, total (in micrograms per liter, ug/l)	1 ug/l
Pyridine	20	Oil & Grease (O&G) [EPA Method 1664	
Arsenic total	10	HEM, MQL of 5.0 mg/l]	5.0 mg/l
Chromium, total	10		
Zinc, total	5		

When an analysis of an effluent sample for any of the parameters listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero (0) shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero (0) based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form.

'The reported value(s) of zero (0) for _____ [list parameter(s)] on the self-reporting form for [monitoring period date range] is based on the following conditions: 1) the analytical method used had a method detection level as sensitive as the MAL specified in the permit, and 2) the analytical results contained no detectable levels above the specified MAL.'

When an analysis of an effluent sample for a parameter indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that parameter, the level of detection achieved shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. A zero (0) may not be used.

- This provision supersedes and replaces Provision 1, Paragraph 1 of Monitoring and Reporting Requirements found on Page 4 of this permit.

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the location(s) specified on the reporting form or the instruction sheet, by the 25th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on the approved TPDES self-report form, Discharge Monitoring Report (DMR) Form EPA No. 3320-1, signed and certified as required by Monitoring and Reporting Requirements No. 10.

3. Storm Water Pollution Prevention Measures- The following requirements apply to Outfall 004 and to those areas within the facility that contribute storm water runoff to Outfall 005:

Pollution Prevention Plan- The permittee shall prepare and implement a pollution prevention plan that shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water and shall describe practices to reduce the pollutants in discharges from the facility. The plan shall be implemented as a provision of this permit. The plan shall be maintained on site or at the adjacent WCS facility authorized by TPDES Permit No. WQ0004038000 and be made readily available for inspection by authorized staff of the TCEQ or the Environmental Protection Agency. The TCEQ may notify the permittee that the plan does not meet one or more of the minimum requirements of this permit. Upon notification the permittee shall amend the plan and submit a written description of the changes required to meet requirements of the permit within 30 days of notification. The plan shall be amended whenever there is a change in design, construction, operation, or maintenance at the facility that has a significant potential to contribute additional pollutants to discharges of storm water or if the plan proves to be ineffective in eliminating or minimizing pollutants in discharges of storm water.

The plan shall include, at a minimum:

A. Pollution Prevention Team -

The plan shall identify specific individuals as members of a storm water Pollution Prevention Team. The team shall be responsible for development and implementation of the storm water pollution prevention plan. The plan shall clearly identify the responsibilities of each team member. Employee training programs shall be developed to inform employees of spill response, good housekeeping procedures, pollution reduction measures, and operation/maintenance of storm water structural controls. Employee training shall be documented as part of the plan.

B. Identification of Pollutant Sources -

The plan shall provide a description of potential sources or pollutants to storm water runoff. A site map shall be developed that delineates drainage areas that contribute to storm water discharges. Storm water structural controls (dikes, berms, and storm water treatment units, for example) and areas of industrial activity that have potential to affect storm water quality shall also be depicted on the map. An inventory of materials handled at the facility that are exposed to rainfall or storm water runoff shall be developed. Materials handling, loading, and storage areas shall be identified on the site map.

C. Pollution Reduction Measures and Controls -

A list of spills/leaks of toxic and hazardous wastes shall be monitored as a part of the plan. Spill clean-up procedures shall be developed and implemented. Actions taken following each event to remove wastes and actions taken to prevent similar, future events, shall be described and documented as a part of the plan. Good housekeeping practices shall be developed and documented as a part of the plan in order to reduce the contribution of pollutants in storm water runoff through maintaining work areas in a clean and orderly manner.

A schedule of routine maintenance inspections shall be developed and implemented to identify potential problems with storm water control devices (dikes, berms, and storm water treatment units...) and facility equipment (valves, tanks...). Inspections shall be conducted at a minimum frequency of once per month. The dates of inspections, names of personnel conducting the inspections, and the results of inspections shall be documented as a part of the plan.

4. There is no mixing zone defined for these discharges to an intermittent stream. Acute toxic criteria apply at the points of discharge via Outfalls 004 and 005.
5. Landfill wastewater means all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contact industrial storm water, wash water (from washing the surfaces of trucks, equipment, containers, and other items that have come in direct contact with waste at the BMDF and that have not been adequately decontaminated), and personnel decontamination water. Landfill wastewater does not include non-contact industrial storm water or storm water associated solely with construction activities.

Only landfill wastewater removed from the BMDU during the disposal operations described in Other Requirement Nos. 12 and 13 may be directly discharged via Outfall 103. Landfill wastewater shall not be discharged from the BMDF via Outfall 004. Landfill wastewater shall not be discharged from the BMDF via Outfall 005 unless it has first been discharged from Outfall 103 in accordance with the effluent limitations of TPDES Permit No. WQ0004857000.

6. Storm Water Associated with Industrial Activities – Storm water that contacts areas of the BMDF in which facility operations have commenced. These areas include, but are not limited to, waste shipping, receiving and staging areas, the BMDU, wastewater management units, and similar areas where storm water can contact industrial pollutants related to facility operations. Storm water associated with industrial activities includes both contact and non-contact industrial storm water as defined below. Storm water that contacts areas of the BMDF that are undeveloped or in which construction activities only are conducted is not industrial storm water.
 - a. Contact industrial storm water means storm water that comes in direct contact with landfill wastes, landfill wastewater, or surface areas that have come in direct contact with landfill wastes or wastewaters and have not been adequately decontaminated. Some specific areas of the BMDF that may produce contact industrial storm water include the open face of the active landfill with exposed waste or waste containers (no cover added), trucks, equipment or machinery that have been in direct contact with waste and have not been adequately decontaminated, and waste dumping areas. All industrial storm water that is collected within a landfill cell that has received waste shall be managed as contact industrial storm water unless cover has been placed over all waste and waste containers in the cell. Contact industrial storm water is landfill wastewater. Contact industrial storm water is restricted from discharge via Outfall 004, and shall only be discharged via Outfall 005 if it has first been discharged via internal Outfall 103 in accordance with the requirements for discharge of landfill wastewater.
 - b. Non-contact industrial storm water means industrial storm water that does not come in direct contact with landfill wastes, landfill wastewater, or surface areas that have come in direct contact with landfill wastes or wastewaters and have not been adequately decontaminated. Non-contact industrial storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill. Non-contact industrial storm water shall be discharged from the BMDF via Outfalls 004 and 005 only.
7. Storm Water Associated with Construction Activities – Storm water runoff from an area where there is either a large construction activity or a small construction activity, as defined in the section entitled Storm Water Associated with Construction Activities on Page No. 22. Storm water discharges associated with construction activities performed by Waste Control Specialists LLC may be authorized by this Permit as described in the section entitled Storm Water Associated with Construction Activities or in accordance with TPDES General Permit TXR150000.

- a. When construction activities are conducted in areas of the BMDF where industrial operations have commenced and storm water may contact industrial pollutants (e.g., storm water accumulated within any portion of the BMDU after disposal operations have commenced), the commingled storm water discharges are also subject to the requirements provided in Other Requirement No. 6. Commingled non-contact industrial storm water and storm water discharges associated with construction activities shall be discharged from the BMDF via Outfalls 004 and 005 only.
- b. Storm water discharges associated solely with construction activities may be, but are not required to be, discharged from the BMDF via Outfalls 004 and 005.

8. DRY WEATHER FLOW CLAUSE

The permittee shall continuously record flow at Outfall 005 via a flow meter or via summation of the recorded flows at Outfall 103. Compliance with the flow limitations established at Outfall 005 on page 2 of this permit will be based upon days in which there is dry weather flow only. For the purpose of this permit, dry weather flow is defined as days in which the total flow at Outfall 005 consists of any of the following sources: previously monitored effluents from internal Outfall 103, and non-contact industrial storm water and/or storm water associated with construction activities resulting from rainfall less than 0.1 inches in a 24-hour period. The permittee shall install a permanent rain gage at the plant site or utilize an existing rain gage at the permittee's adjacent facility (authorized via TPDES Permit No. WQ0004038000) and keep daily records of rainfall and the resulting flow at Outfall 005. Flow at Outfall 005 during days when the rainfall exceeds 0.1 inches during any 24-hour period shall not be used in calculating the daily average or daily maximum flows to be submitted on the monthly effluent reports forms.

9. The permittee is authorized to reuse non-contact industrial storm water and storm water associated with construction activities for on site recycling/reuse activities dust suppression and make up water for waste stabilization. The permittee is authorized to reuse landfill wastewater, including contact industrial storm water, as a dust suppressant within the active landfill cells only. Landfill wastewater, including contact industrial storm water, may not be reused in any area or manner that may cause the unauthorized discharge of wastewater or endanger human health or the environment.
10. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 2311 of the Rio Grande Basin and any subsequent updating of the water quality model for Segment No. 2311, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended pursuant to 30 TAC Sections 305.62, as a result of such review.
11. Reporting requirements pursuant to 30 TAC Sections 319.1-319.12 and any additional effluent reporting requirements contained in the permit are suspended from the effective date of the permit until plant start-up or discharge, whichever comes first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ's Applications Review and Processing Team (MC 148) of the Water Quality Division, and the Regional Office, 45 days prior to plant start-up or anticipated discharge via either Outfall 004 or Outfall 005 (i.e., internal Outfall 103).

Monitoring results shall be provided at the intervals specified in the permit. For pollutants which are monitored annually, effluent reports shall be submitted in September of each year. For pollutants which are monitored twice per year, the first effluent report shall be submitted six months after the date of plant start-up or discharge, whichever comes first, and subsequent reports every six months thereafter.

For pollutants which are monitored four times per year, the first effluent report shall be submitted three months after the date of plant start-up or discharge, whichever comes first, and subsequent reports every three months thereafter.

12. The operation whereby untreated landfill wastewater removed from the Byproduct Material Disposal Unit (BMDU) is discharged via Outfall 103 from the two 500,000 gallon storage tanks located within the boundary of the Byproduct Material Disposal Facility (BMDF) shall be specifically authorized by a minor amendment to the current, originally issued RML No. R05807 dated May 29, 2008 for only the disposal operations as defined in Other Requirement No. 13. Such authorization shall be restricted to the conditions that the wastewater meets the effluent limitations of TPDES Permit No. WQ0004857000 for Outfall 103, and that the only wastes that have been disposed in the BMDU, considering all cells containing waste, are the Fernald waste canisters.
13. The design and operation of Outfall 103, which is an onsite outfall located within the boundary of the BMDF, shall be specifically authorized by RML No. R05807. Such authorization shall have considered the design, operational, and environmental impact aspects of the disposal operations at the BMDF, and shall be based upon the anticipated uncontaminated characteristics of the storm water removed from the BMDU and stored in the two 500,000 gallon tanks not requiring treatment prior to discharge at Outfall 103. The BMDU operation shall be limited to the receipt and disposal of byproduct material contained in the sealed Fernald waste canisters, wherein this limitation, and the required design and operation of Outfall 103 shall also be incorporated into RML No. R05807 by a minor amendment to this current, originally issued license dated May 29, 2008.
14. Tables 1 and 2 shall be completed with the analytical results for Outfall 005 and sent to the TCEQ, Wastewater Permitting Section (MC 148), within 90 days (and no longer than 30-days from receipt of the analytical results from the applicable laboratories) following permit issuance or discharge. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. Test methods utilized to determine compliance with the permit monitoring and reporting requirements and/or limitations shall be according to EPA methodology and sensitive enough to detect the parameters listed below at the minimum analytical level (MAL).

Table 1: For Outfall 005 (when discharge commences), analysis is required for all pollutants. Wastewater shall be sampled and analyzed for those parameters listed in Table 1 for a minimum of four (4) separate sampling events which are a minimum of one (1) week apart.

Table 2: For Outfall 005 (when discharge commences), analysis is required for all pollutants. Wastewater shall be sampled and analyzed for those parameters listed in Table 2 for a minimum of four (4) separate sampling events which are a minimum of one (1) week apart.
15. Table 3 shall be completed with the analytical results for Outfall 004 for those parameters listed in Table 3 for a minimum of four (4) separate sampling events which are a minimum of one (1) week apart. The analytical results shall be sent to the TCEQ, Wastewater Permitting Section (MC 148), within 90 days (and no longer than 30-days from receipt of the analytical results from the applicable laboratories) following permit issuance or discharge. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. Test methods utilized to determine compliance with the permit monitoring and reporting requirements and/or limitations shall be according to EPA methodology and sensitive enough to detect the parameters at the minimum analytical level (MAL).

ATTACHMENT A

TABLE 1

Outfall No.:	<input type="checkbox"/> C <input type="checkbox"/> G	Table 1: Effluent Concentration (mg/l)					
Pollutants		Samp. 1	Samp. 2	Samp. 3	Samp. 4	Average	
BOD (5-day)							
CBOD (5-day)							
Chemical Oxygen Demand							
Total Organic Carbon							
Dissolved Oxygen							
Ammonia Nitrogen							
Total Suspended Solids							
Nitrate Nitrogen							
Total Organic Nitrogen							
Total Phosphorus							
Oil and Grease							
Total Residual Chlorine							
Total Dissolved Solids							
Sulfate							
Chloride							
Fluoride							
Fecal Coliform							
Temperature(°F)							
pH (Standard Units; min/max)							
Effluent Concentration (µg/l)							MAL (µg/l)
Total Aluminum							30
Total Antimony							30
Total Arsenic							10
Total Barium							10
Total Beryllium							5
Total Cadmium							1
Total Chromium							10
Trivalent Chromium							N/A
Hexavalent Chromium							10
Total Copper							10
Cyanide							20
Total Lead							5
Total Mercury							0.2
Total Nickel							10
Total Selenium							10
Total Silver							2.0
Total Thallium							10
Total Zinc							5

TABLE 2

Outfall No.:	<input type="checkbox"/> C <input type="checkbox"/> G	Table 2: Effluent Concentration ($\mu\text{g/l}$) (*1)					
Pollutants		Samp. 1	Samp. 2	Samp. 3	Samp. 4	Average	MAL ($\mu\text{g/l}$)
Benzene							10
Benidine							50
Benzo(a)anthracene							10
Benzo(a)pyrene							10
Carbon Tetrachloride							10
Chlorobenzene							10
Chloroform							10
Chrysene							10
Cresols							(*2)
Dibromochloromethane							10
1,2-Dibromoethane							2
1,4-Dichlorobenzene							10
1,2-Dichloroethane							10
1,1-Dichloroethylene							10
Fluoride							500
Hexachlorobenzene							10
Hexachlorobutadiene							10
Hexachloroethane							20
Methyl Ethyl Ketone							50
Nitrobenzene							10
n-Nitrosodiethylamine							20
n-Nitroso-di-n-Butylamine							20
PCB's, total (*3)							1
Pentachlorobenzene							20
Pentachlorophenol							50
Phenanthrene							10
Pyridine							20
1,2,4,5-Tetrachlorobenzene							20
Tetrachloroethylene							10
Trichloroethylene							10
1,1,1-Trichloroethane							10
2,4,5-Trichlorophenol							50
TTHM (Total Trihalomethanes)							10
Vinyl Chloride							10

(*1) Indicate units if different from $\mu\text{g/l}$.(*2) MAL's for Cresols: p-Chloro-m-Cresol 10 $\mu\text{g/l}$; 4,6-Dinitro-o-Cresol 50 $\mu\text{g/l}$; p-Cresol 10 $\mu\text{g/l}$.

(*3) Total of PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016.

TABLE 3

Outfall No.:	Average Values (mg/l)		Maximum Values (mg/l)			
Pollutants	Grab Samples Taken During First 30 min.	Flow Weighted Composite Samples	Grab Samples Taken During First 30 min.	Flow Weighted Composite Samples	No. of Storm Events Sampled	MAL mg/l
VOLATILE COMPOUNDS						
pH (Standard Units)						---
Total Suspended Solids						---
Chemical Oxygen Demand						---
Total Organic Carbon						---
Oil and Grease						---
Total Arsenic						0.010
Total Barium						0.010
Total Cadmium						0.001
Total Chromium						0.010
Trivalent Chromium						---
Hexavalent Chromium						0.010
Total Copper						0.010
Total Lead						0.005
Total Mercury						0.0002
Total Nickel						0.010
Total Selenium						0.010
Total Silver						0.002
Total Zinc						0.005

16. Based on an agreement between Waste Control Specialists, LLC and the State of New Mexico, the following requirement has been included in this permit. The sampling point for this requirement is downstream of the discharge point for this permit (Outfalls 004 and 005) and prior to the crossing of the unnamed ditch into the State of New Mexico. This location is represented as Outfall 002.

In addition to the above monitoring requirements for Outfall Numbers 005, 103 and 004, the Permittee shall sample effluent, at Outfall 002 as set forth below (*2). Based on an agreement between Waste Control Specialists, LLC and the Environmental Protection Agency (EPA) Region 6, the results of the analyses will be reported on a discharge monitoring report (DMR) form.

Whenever discharge occurs at Outfall 002, located at the drainage ditch that exits the west side of the RCRA facility boundary (latitude 32 degrees 26 minutes 07 seconds/ longitude 103 degrees 03 minutes 48 seconds), the Permittee shall monitor the quality of the discharge at the point where the ditch crosses the RCRA facility access road, prior to continuing west to the Texas/ New Mexico state line, and shall comply with the following effluent limitations:

Pollutant* Total, unless indicated	CAS Number	Quality/Concentration (µg/l unless indicated)		Monitoring Requirements		Minimum Quantification Level (MQL) (µg/l unless indicated) (*3)
		Daily Average	Daily Maximum	Frequency of Analysis	Sample Type	
pH (Standard Units)		6 S.U. minimum	9 S.U. maximum	1/month (*1)	Grab	
Fluoride		1600	1600	1/month (*1)	Grab	
Chloride		250000	250000	1/month (*1)	Grab	
Iron		1000	1000	1/month (*1)	Grab	
Manganese		200	200	1/month (*1)	Grab	
Sulfate (SO ₄)		600000	600000	1/month (*1)	Grab	
Total dissolved solids (TDS)		1000000	1000000	1/month (*1)	Grab	
Nitrate (NO ₃ as N)		10000	10000	1/month (*1)	Grab	
Uranium,	7440-61-1	30	30	1/month (*1)	Grab	0.1
Chlorine residual	7782-50-5	11	11	1/month (*1)	Grab	
Vanadium	7440-62-2	100	100	1/month (*1)	Grab	50
Tritium		20000 pCi/l	20000 pCi/l	1/month (*1)	Grab	
Adjusted gross alpha		15 pCi/l	15 pCi/l	1/month (*1)	Grab	
Radium 226 + Radium 228		30 pCi/l	30 pCi/l	1/month (*1)	Grab	
Aluminum	7429-90-5	750	750	1/month (*1)	Grab	2.5
Barium,	7440-39-3	1000	1000	1/month (*1)	Grab	100
Boron	7440-42-8	750	750	1/month (*1)	Grab	100
Cobalt	7440-48-4	50	50	1/month (*1)	Grab	50
Molybdenum	7439-98-7	1000	1000	1/month (*1)	Grab	10
Antimony	7440-36-0	640	640	1/month (*1)	Grab	60
Arsenic	7440-38-2	15.67	15.67	1/month (*1)	Grab	0.5
Cadmium	7440-43-9	0.42	0.42	1/month (*1)	Grab	1
Chromium	18540-29-9	50	50	1/month (*1)	Grab	10
Copper	7440-50-8	7.6	7.6	1/month (*1)	Grab	0.5
Lead	7439-92-1	52	52	1/month (*1)	Grab	0.5
Mercury	7439-97-6	0.77	0.77	1/month (*1)	Grab	0.005
Nickel	7440-02-0	237	237	1/month (*1)	Grab	0.5
Selenium, total recoverable	7782-49-2	5	5	1/month (*1)	Grab	5
Silver	7440-22-4	0.20	0.20	1/month (*1)	Grab	0.5
Thallium	7440-28-0	6.3	6.3	1/month (*1)	Grab	0.5
Zinc	7440-66-6	91	91	1/month (*1)	Grab	20
Cyanide	57-12-5	200	200	1/month (*1)	Grab	10
Cyanide, weak acid dissociable	57-12-5	5.2	5.2	1/month (*1)	Grab	10
2,3,7,8-TCDD Dioxin	1746-01-6	5.1E-08	5.1E-08	1/month (*1)	Grab	0.00001
Benzene	71-43-2	10	10	1/month (*1)	Grab	10
Carbon tetrachloride	56-23-5	10	10	1/month (*1)	Grab	2
Chloroform	67-66-3	100	100	1/month (*1)	Grab	10
1,1-Dichloroethane	75-34-3	25	25	1/month (*1)	Grab	10
1,2-Dichloroethane	107-06-2	10	10	1/month (*1)	Grab	10
1,1-Dichloroethylene	75-35-4	5	5	1/month (*1)	Grab	10
Ethylbenzene	100-41-4	750	750	1/month (*1)	Grab	10
Total xylenes	1330-20-7	620	620	1/month (*1)	Grab	
Methylene chloride	75-09-2	100	100	1/month (*1)	Grab	20

Pollutant* Total, unless indicated	CAS Number	Quality/Concentration (µg/l unless indicated)		Monitoring Requirements Frequency of Analysis	Sample Type	Minimum Quantification Level (MQL) (µg/l unless indicated) (*3)
		Daily Average	Daily Maximum			
1,1,2,2-Tetrachloroethane	79-34-5	10	10	1/month (*1)	Grab	10
Tetrachloroethylene	127-18-4	33	33	1/month (*1)	Grab	10
Toluene	108-88-3	750	750	1/month (*1)	Grab	10
1,1,1-Trichloroethane	71-55-6	60	60	1/month (*1)	Grab	10
1,1,2-Trichloroethane	79-00-5	10	10	1/month (*1)	Grab	10
1,1,2-Trichloroethylene	79-01-6	100	100	1/month (*1)	Grab	10
Vinyl chloride	75-01-4	1	1	1/month (*1)	Grab	10
Ethylene dibromide	106-93-4	0.1	0.1	1/month (*1)	Grab	
PAHs: Total naphthalene + monomethylnaphthalene		30	30	1/month (*1)	Grab	
Pentachlorophenol	87-86-5	19	19	1/month (*1)	Grab	5
Phenol	108-95-2	5	5	1/month (*1)	Grab	10
Benzo(a)pyrene	50-32-8	0.18	0.18	1/month (*1)	Grab	5
Hexachlorobenzene	118-74-1	0.0029	0.0029	1/month (*1)	Grab	5
Aldrin	309-00-2	0.00050	0.00050	1/month (*1)	Grab	0.01
Gamma-BHC (Lindane)	58-89-9	0.95	0.95	1/month (*1)	Grab	0.05
Chlordane	57-74-9	0.0081	0.0081	1/month (*1)	Grab	0.2
4,4'-DDT and derivatives		0.001	0.001	1/month (*1)	Grab	0.02
Dieldrin	60-57-1	0.00054	0.00054	1/month (*1)	Grab	0.02
alpha-Endosulfan	959-98-8	0.22	0.22	1/month (*1)	Grab	0.01
beta-Endosulfan	33213-65-9	0.22	0.22	1/month (*1)	Grab	0.02
Endrin	72-20-8	0.086	0.086	1/month (*1)	Grab	0.02
Heptachlor	76-44-8	0.52	0.52	1/month (*1)	Grab	0.01
Heptachlor epoxide	1024-57-3	0.52	0.52	1/month (*1)	Grab	0.01
PCBs (*4)	1336-36-3	0.00064	0.00064	1/month (*1)	Grab	(*5)
Toxaphene	8001-35-2	0.73	0.73	1/month (*1)	Grab	0.3

(*1) To be performed when discharge occurs.

(*2) Sample results shall be maintained onsite, shall be made available upon request by TCEQ and shall be submitted within 60 days of the date of sampling to the New Mexico Environment Department (NMED) at the following address: Program Manager, Point Source Regulation Section, Surface Water Quality Bureau, New Mexico Environment Department, P.O. Box 5469, Santa Fe, New Mexico 87502-5469.

(*3) Unless otherwise specified, all sampling and analytical techniques shall conform with "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act," 40 CFR § 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR §§ 136.3(d), 136.4, and 136.5. Test methodology used shall be sufficiently sensitive to detect the above constituents at the listed MQLs.

(*4) EPA published Method 1668 Revision A or B shall be used for total PCBs analysis.

(*5) The Permittee shall develop congener-basis storm water effluent-specific MQLs for PCBs. Upon written approval by the NMED Surface Water Quality Bureau, the effluent specific MQL shall be utilized by the permittee for all future reporting requirements.

STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Waste Control Specialists LLC may develop a Storm Water Pollution Prevention Plan (SWP3), and follow the other conditions of this permit, to authorize storm water discharges from each construction activity performed by Waste Control Specialists LLC, that results in a land disturbance of one (1) or more acres. Alternatively, Waste Control Specialists LLC may apply under TPDES general permit TXR150000 for authorization to discharge storm water runoff from construction activities.

1. Eligible Construction Activities

Discharges of storm water runoff from construction activities that are located at the facility authorized under this TPDES permit, and where Waste Control Specialists LLC is the construction site operator, are eligible for authorization under this permit.

2. Eligible Discharges

- a. Discharges of storm water runoff from small and large construction activities may be authorized under this permit.
- b. Discharges of storm water runoff from concrete batch plants, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas may be authorized under this permit provided:
 - i. the activity is located on the permitted construction site and directly supports the construction activity;
 - ii. a storm water pollution prevention plan is developed according to the provisions of this permit and includes appropriate controls and measures to reduce erosion and the discharge of pollutants in storm water runoff from the supporting industrial activity site; and
 - iii. the concrete batch plant and asphalt batch plant does not operate beyond the completion date of the construction activity.

3. The following non-storm water discharges may be discharged as a result of the construction activities:

- a. Water line flushing and similar potable water sources;
- b. Uncontaminated pumped ground water, including infiltrated water in trenches or other excavated areas;
- c. Air conditioning condensate; and
- d. Pavement, exterior building, vehicle, and equipment wash water from washing activities conducted without the use of detergents or other chemicals.

4. Storm Water Pollution Prevention Plan (SWP3)

The permittee, to qualify for authorization to discharge storm water associated with construction activities under this permit, must:

- a. develop a SWP3, according to the provisions of this permit, that covers the entire construction site and implement that plan prior to commencing construction activities;
- b. ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this permit and the SWP3;
- c. ensure all contractors are aware of the SWP3 requirements, are aware of the personnel responsible for the day-to-day operations of the SWP3, and know who to contact concerning SWP3 requirements; and
- d. ensure that the SWP3 identifies the personnel responsible for implementation of control measures described in the plan.

5. Deadlines for SWP3 Preparation and Compliance

The SWP3 must be:

- a. completed and implemented prior to commencing construction activities that result in soil disturbance;
- b. updated as is necessary to reflect the changing conditions of the site and activities, including new areas of responsibility and changes in best management practices; and
- c. provide for compliance with the terms and conditions of this permit.

6. Plan Review and Making Plans Available

The SWP3 must be retained on-site at the construction site or made readily available at the time of an on-site inspection to: the Executive Director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site.

7. Keeping Plans Current

The permittee must amend the SWP3 whenever:

- a. there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3; or
- b. results of inspections or investigations by construction site operators, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this permit.

8. Contents of SWP3

The SWP3 must include, at a minimum, the information described in this section.

- a. A site description, or project description must be developed to include:
 - i. a description of the nature of the construction activity, potential pollutants and sources;

- ii. a description of the intended schedule or sequence of major activities that will disturb soils for major portions of the site;
 - iii. a detailed site map indicating the following:
 - (1) drainage patterns and approximate slopes anticipated after major grading activities;
 - (2) areas where soil disturbance will occur;
 - (3) locations of all major structural controls either planned or in place;
 - (4) locations where stabilization practices are expected to be used;
 - (5) locations where storm water discharges exit the company property or where they enter waters of the state prior to exiting company property; and
 - iv. the location and description of asphalt plants and concrete plants (if any) providing support to the construction site and that are also authorized under this permit;
- b. The SWP3 must describe the structural and the non-structural controls (best management practices) that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation and the party responsible for implementation. At a minimum, the description must include the following components:
- i. Erosion and Sediment Controls
 - (1) Erosion and sediment controls must be designed to retain sediment on-site to the maximum extent practicable with consideration for local topography and rainfall.
 - (2) Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications. If periodic inspections or other information indicates a control has been used incorrectly, or that the control is performing inadequately, the construction site operator must replace or modify the control.
 - (3) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%.
 - (4) If sediment escapes the construction site, accumulations must be removed at a frequency to minimize further negative effects and, whenever feasible, prior to the next rain event.
 - (5) Controls must be developed to limit offsite transport of litter, construction debris, and construction materials by storm water runoff.
 - c. Stabilization Practices

The SWP3 must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where it is possible.

- i. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation and other similar measures.
- ii. Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in (1) through (2) below, must be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.
 - (1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.
 - (2) Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site.

d. Structural Control Practices

The SWP3 must include a description of any structural control practices used to divert flows away from exposed soils, to limit the contact of runoff with disturbed areas, or to lessen the off-site transport of eroded soils.

- i. Sediment basins are required, where feasible, for common drainage locations that serve an area with ten (10) or more acres that remain disturbed at any one time. Sediment basins may be either temporary or permanent, but must be designed to store either the calculated volume of runoff from a 2 year, 24 hour storm from acreage drained, or designed to provide 3,600 cubic feet of storage per acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone final stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area on site, public safety, and other similar considerations. Where sediment basins are not feasible, alternative sediment controls, which may include a series of smaller sediment basins, must be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area.
- ii. Sediment traps and sediment basins may be used to control solids in storm water runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction. Alternatively, a sediment basin providing storage for a calculated volume of runoff from these areas for a 2-year, 24- hour storm or 3,600 cubic feet of storage per acre drained may be provided.

e. Permanent Storm Water Controls

A description of any structural controls (i.e. detention ponds) that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWP3.

f. Other Controls

- i. Off-site vehicle tracking of sediments and the generation of dust must be minimized.
- ii. The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to reduce pollutants from these materials.

g. Approved State and Local Plans

- i. Permittees must ensure the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by federal, state, or local officials.
- ii. SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or storm water management site plans or site permits approved by state or local official for which the permittee receives written notice.

h. Maintenance

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If through inspections the permittee determines that BMPs are not operating effectively, maintenance must be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

i. Inspections of Controls

- i. Personnel provided by the permittee and familiar with the SWP3 must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site, at least once every fourteen (14) calendar days and within twenty four (24) hours of the end of a storm event of 0.5 inches or greater.
- ii. Personnel, familiar with all structural and non-structural controls described in the SWP3 and utilized at the site, must inspect disturbed areas of soil and areas used for storage of materials that are exposed to precipitation for evidence of, or the potential for, pollutants entering the drainage system. Sediment and erosion control measures identified in the SWP3 must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. These inspection must be conducted at least once every fourteen (14) calendar days and within twenty four (24) hours of the end of a storm event of 0.5 inches or greater.

Discharge locations or points from the site that are accessible must be inspected to determine if erosion control measures are effective in preventing visually noticeable changes to receiving waters, including persistent cloudy appearance in water color and noticeable accumulation of sediments. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable.

The frequency for these inspections must be established by the permittee in the SWP3 with consideration for local rainfall and soil, but must occur at least once during the construction activity if a discharge occurs.

- iii. The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.
- iv. A summary report of the inspection must be prepared including the names of personnel making the inspection, the dates of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: the locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.
- v. Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3.

9. Additional Retention of Records Requirements

The permittee must retain a copy of the SWP3 and any summary reports for a minimum period of three (3) years from the date that final stabilization has been achieved.

10. Definitions Applicable to Discharges of Storm Water Associated With Construction Activities

- a. Best Management Practices (BMPs) - schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- b. Construction Site Operator - The entity associated with a construction project that meets all of the following criteria:
 - i. the entity has operational control over construction plans and specifications to the extent necessary to meet the requirements and conditions of this permit; and
 - ii. the entity has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a storm water pollution prevention plan for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the Storm Water Pollution Prevention Plan or comply with other permit conditions).
- c. Control Measure - any Best Management Practice or other method used to prevent or reduce the discharge of pollutants.
- d. Conveyance - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport storm water runoff.

- e. Discharge - when used without a qualifier, refers to the discharge of storm water runoff or certain non-storm water discharges as allowed under the authorization of this permit.
- f. Final Stabilization - A construction site status where either of the following two conditions are met:
 - i. All soil disturbing activities at the site have been completed and a uniform (e.g. evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
 - ii. For construction projects on land used for agricultural purposes (e.g. pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition 1 above.
- g. Large Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance.
- h. Small Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance.
- i. Storm Water - storm water runoff, snow melt runoff, and surface runoff and drainage.
- j. Storm Water Associated with Construction Activity - Storm water runoff from an area where there is either a large construction activity or a small construction activity.

48-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this Section apply to Outfall 005 for whole effluent toxicity testing (biomonitoring).

1. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.
- b. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update:
 - 1) Acute static renewal 48-hour definitive toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.
 - 2) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit. All test results, valid or invalid, must be submitted as described below.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These additional effluent concentrations are 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, Chemical Specific (CS) effluent limits, a Best Management Practice (BMP), additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.
- e. Testing Frequency Reduction
 - 1) If none of the first four consecutive quarterly tests demonstrates significant lethal or sub-lethal effects, the permittee may submit this information in writing and, upon approval from the Water Quality Standards Team, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.
 - 2) If one or more of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee shall continue quarterly testing for that species until the permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant lethal effects, the permittee will resume a quarterly testing frequency for that species until the permit is reissued.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:

- 1) a control mean survival of 90% or greater;
- 2) a Coefficient of Variation percent (CV%) of 40 or less for both the control and critical dilution. However, if significant lethality is demonstrated, a CV% greater than 40 shall not invalidate the test. The CV% requirement does not apply when significant lethality occurs.

b. Statistical Interpretation

- 1) For the water flea and fathead minnow tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof.
- 2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The EPA manual, "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
- 3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- 4) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference at the 95% confidence level between the survival, reproduction, or growth of the test organism(s) in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism(s) in the control (0% effluent).
- 5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3 above and a full report will be submitted to the Water Quality Standards Team
- 6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The above-referenced guidance manual will be used when making a determination of test acceptability.
- 7) The Water Quality Standards Team will review test results (i.e., Table 1 and Table 2 forms) for consistency with established TCEQ rules, procedures, and permit requirements.

c. Dilution Water

- 1) Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point, but unaffected by the discharge.

Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall; (a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge, or (b) utilize the closest downstream perennial water unaffected by the discharge.

- 2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of item 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of item 2.a;
 - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days);
 - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3 of this Section.

The synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or a natural water in the drainage basin that is unaffected by the discharge, provided the magnitude of these parameters will not cause toxicity in a synthetic dilution water control that has been formulated to match the pH, hardness, and alkalinity naturally found in the receiving water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

- 1) The permittee shall collect a minimum of two flow-weighted 24-hour composite samples from Outfall 005. The second 24-hour composite sample will be used for the renewal of the dilution concentrations for each toxicity test. A 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportionally to flow, or a sample continuously collected proportionally to flow over a 24-hour operating day.
- 2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first 24-hour composite sample. The holding time for any subsequent 24-hour composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

If Outfall 005 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time, is waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with daily renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Part 3 of this Section.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Water Quality Standards Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof, for every valid and invalid toxicity test initiated whether carried to completion or not. All The full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.
- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit. All Table 1 reports must include the information specified in the Table 1 form attached to this permit.
 - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12 month period.
 - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6 month period.
 - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.
 - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes on the DMR for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TEM3D, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 2) For the water flea, Parameter TOM3D, report the NOEC for survival.
 - 3) For the water flea, Parameter TXM3D, report the LOEC for survival.
 - 4) For the fathead minnow, Parameter TEM6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 5) For the fathead minnow, Parameter TOM6C, report the NOEC for survival.
 - 6) For the fathead minnow, Parameter TXM6C, report the LOEC for survival.
- d. Enter the following codes on the DMR for retests only:
 - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a toxicity test demonstrates significant lethality. Significant lethality is defined as a statistically significant difference, at the 95% confidence level, between the survival of the test organism at the critical dilution when compared to the survival of the test organism in the control.

- a. The permittee shall conduct a total of two additional tests (retests) for any species that demonstrates significant lethality. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.
- c. The provisions of item 4.a. are suspended upon completion of the two retests and submittal of the TRE Action Plan and Schedule defined in Part 5 of this Section.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the last test day of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the last test day of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethal effects at the critical dilution for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:

- 1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081).

All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- 2) Sampling Plan - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/ identification/ confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality.

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;

- 3) Quality Assurance Plan - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
 - 4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical-specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
 - 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
 - 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once.

This provision accommodate situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall provide information pertaining to the specific control mechanism(s) selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism(s). A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.
- h. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify CS limits.

TABLE 1 (SHEET 1 OF 2)
WATER FLEA SURVIVAL

Dates and Times No. 1 FROM: _____ Date _____ Time _____ TO: _____ Date _____ Time _____
Composites
Collected No. 2 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep.	Percent effluent (%)					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%							

*coefficient of variation = standard deviation x 100/mean (calculation based on young of the surviving adults)
Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less ($p = 0.05$) than the control survival?

CRITICAL DILUTION (100%): _____ YES _____ NO

Enter percent effluent corresponding to the NOEC/LOEC below:

- 1) NOEC survival = _____ % effluent
- 2) LOEC survival = _____ % effluent

TABLE 1 (SHEET 2 OF 2)
FATHEAD MINNOW SURVIVAL

Dates and Times No. 1 FROM: _____ Date Time TO: _____ Date Time

Composites

Collected No. 2 FROM: _____ Date Time TO: _____ Date Time

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

*coefficient of variation = standard deviation x 100/mean (calculation based on young of the surviving adults)
Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less ($p = 0.05$) than the control survival?

CRITICAL DILUTION (100%): _____ YES _____ NO

Enter percent effluent corresponding to the NOEC\LOEC below:

- 1) NOEC survival = _____ % effluent
- 2) LOEC survival = _____ % effluent

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 005 for whole effluent toxicity testing (biomonitoring).

1. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this Section. Such testing will determine compliance with the Surface Water Quality Standard, 30 TAC §307.6(e)(2)(B), of greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof:
 - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution.
 - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit. All test results, valid or invalid, must be submitted as described below.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. Except as discussed in item 2.b., the control and/or dilution water shall consist of a standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, a Best Management Practice (BMP), a Chemical-Specific (CS) limit, additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.
- e. If the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this Section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in item a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency defined in item b.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water - In accordance with item 1.c., the control and/or dilution water shall normally consist of standard, synthetic, moderately hard, reconstituted water. If the permittee utilizes the results of a chronic test to satisfy the requirements in item 1.e., the permittee may use the receiving water or dilution water that meets the requirements of item 2.a as the control and dilution water.

c. Samples and Composites

- 1) The permittee shall collect one flow-weighted 24-hour composite sample from Outfall 005. A 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a 24-hour operating day.
- 2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the 24-hour composite sample. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If the Outfall ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report required in Part 3 of this Section.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Water Quality Standards Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof, for every valid and invalid toxicity test initiated. All full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.
- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit. All Table 2 reports must include the information specified in the Table 2 form attached to this permit.
 - 1) Semiannual biomonitoring test results are due on or before January 20th and July 20th for biomonitoring conducted during the previous 6 month period.
 - 2) Quarterly biomonitoring test results are due on or before January 20th, April 20th, July 20th, and October 20th, for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes on the DMR for the appropriate parameters for valid tests only:
 - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
 - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- d. Enter the following codes on the DMR for retests only:

- 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

4. Persistent Mortality

The requirements of this Part apply when a toxicity test demonstrates significant lethality, here defined as a mean mortality of 50% or greater to organisms exposed to the 100% effluent concentration after 24-hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These additional effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5 of this Section.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethality for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:
 - 1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
 - 2) Sampling Plan - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/ identification/ confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality.

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;

- 3) Quality Assurance Plan - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
 - 4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly TRE Activities Reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical-specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
 - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
 - 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
 - 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
 - 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once. This provision accommodate situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall specify the control mechanism(s) that will, when implemented, reduce effluent toxicity as specified in item 5.g. The report will also specify a corrective action schedule for implementing the selected control mechanism(s). A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC 307.6.(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The requirement to comply with 30 TAC 307.6.(e)(2)(B) may be exempted upon proof that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g. metals) form a salt compound. Following the exemption, the permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.
- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify a CS limit.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time (am/pm)	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____ % effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

		Time (am/pm)	Date
Composite Sample Collected			
Test Initiated			

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = _____ % effluent