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VIA FEDEX

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July 21, 2010

Mr. Jeff Martin Florida Department of Environmental Protection Northeast District 7825 Baymeadows Way, Suite B200 Jacksonville, FL 32256

Subject: **Response to Request for Information Letter dated June 29, 2010** NPDES Stormwater Application FL071462-IW Former Koppers Facility, Gainesville, Alachua County, Florida

Dear Mr. Martin:

On behalf of Beazer East, Inc. (Beazer), this letter provides a response to the referenced June 29, 2010, Request for Additional Information (RAI) on Beazer's June 1, 2010, application for an individual industrial stormwater discharge permit at the former Koppers wood-treatment facility in Gainesville, Florida. A revised permit application and revised *Preliminary Stormwater Design Report* (attachment to the permit application) are included with this letter. This revised application addresses the FDEP requests and replaces the one sent on June 1, 2010.

Please note that Beazer is a separate company from Koppers Inc. (Koppers). Beazer obtained the Gainesville property from Koppers effective March 30, 2010. Industrial activity at the Site has ceased and the facilities necessary for wood treatment have been permanently removed or decommissioned. There is no current or planned discharge of industrial process water to surface water.

Beazer is presently working with the US Environmental Protection Agency as well as FDEP and local agencies to define and implement the full range of actions that will be needed to remediate this Superfund Site. The stormwater permit being sought is strictly for stormwater resulting from contact with existing Site soils and sediment during the *interim* period between now and when the final remedial components are in place. Those *final* remedial components will include robust stormwater controls such as surface covers and retention/detention ponds. All of the final-remedy stormwater controls will be designed in accordance with FDEP rules and regulations, including 62-302 FAC, 62-620 FAC, and 62-330 FAC using the SJRWMD Applicant's Handbook for Management and Storage of Surface Waters.

In the interim period, Beazer desires to make improvements to the Site that will reduce soil erosion, stormwater sediment generation, and dust generation. This will result in a decrease in the amount of wood-treatment-related constituents in stormwater. In contrast to a typical development that involves construction of roofed structures and paved surfaces, Beazer's proposal includes removal of structures and addition of vegetation where the ground is now hardened and bare. Beazer believes the proposed measures will have an immediate positive environmental effect.

## **Responses to Specific RAI Items**

The RAI letter identified several items requiring response. Each of those items is listed below in italics, along with Beazer's response in blue font:

- 1. Form 1 and Form 2F:
  - a. Form 1. Page 1-15. Did not receive an original signature from Mr. Markwell.

**Response:** The revised application included with this letter contains an original signature.

b. Form 2F. Page 2F-14. Did not receive an original signature from Mr. Markwell.

**Response:** The revised application included with this letter contains an original signature.

c. Page 2F-16. Did not receive an original signature from Mr. Markwell.

**Response:** The revised application included with this letter contains an original signature.

d. Form 2F. Page VII-1 and VII-2: Is discharge data available for pH, hardness, turbidity and dioxin?

**Response:** Beazer has not collected surface-water quality data. The June 1, 2010 application included data taken from a prior permit application made by the prior property owner, Koppers. The revised application included with this letter includes additional data previously taken by Koppers and data reported more recently by the Alachua County Environmental Protection Division (ACEPD). However, Beazer does not have full documentation of the validity of this data and Beazer plans to investigate these data further. Beazer will forward to FDEP all stormwater data received from ACEPD in the future, plus any validation analyses of these data. Additionally, Beazer anticipates collecting stormwater samples for analysis after FDEP approval of the proposed interim measures. Note that ACEPD apparently measured pH, but did not include measured pH values in their reports.

- 2. Section II, page 2F-13 It is understood that a final feasibility study of Remedial Alternatives will be submitted to DEP and EPA. For the Design Report, respond to the following questions:
  - a. Figure 3 indicates 34.03 acres while the report mentions 36 acres of impervious area; discuss the difference.

**Response:** The 34.03 acres does not include mulched roads or the small area north of the berms that will be root-raked/disked and seeded but is outside of the area served by the ponds because of the more steeply sloping topography in this area. As indicated in the response to comment 2.i, grading of this small northern area will be done to ensure that stormwater flow reports to the main drainage ditch.

Note that the area that is called "impervious" is the original design report is mostly bare ground with some highly compacted soil that generates runoff. This area is not impervious but is treated as such in generating conservative runoff volume estimates; the term "bare ground" is used in the revised report to avoid confusion.

b. Section 3 needs to indicate that watering and spraying activities as well as other dust control measures will be provided.

**Response:** The revised report includes specification that a water truck and sprayer will be used to keep the ground moist during root raking/disking, swale construction, and berm construction to minimize generation of dust. Grass seeding will occur very soon after root-raking/disking. Also, sod will be placed in the swales and on the berms immediately after they are constructed.



c. Section 4 has a 10 yr and 100 yr, one-half-inch design basis. Describe the basis for this selection and provide calculations of pre versus post impervious area.

**Response:** The 10-yr and 100-yr storms are shown for illustration but are not used as a design basis for the proposed interim measures. Due to the proposed grass seeding and other measures, runoff flow and volume will be significantly reduced versus the current condition for *any* size storm. The reduction in runoff flow will also result in improved stormwater quality. Currently, there are approximately 36 acres of bare ground and roofs on Site. After implementation of the proposed measures, impervious area will be minimal (less than one acre).

Stormwater runoff flow/volume calculations made for the final remedial design for the Site will be consistent with all FDEP rules and regulations including 62-302 FAC, 62-620 FAC, and 62-330 FAC using the SJRWMD Applicant's Handbook for Management and Storage of Surface Waters.

d. Section 5.2 mentions only monthly inspections at significant runoff events. Revise to weekly visual inspections of the site for O and M reasons as well as inspections at rainfall events of one-half inch or greater.

**Response:** The revised application indicates that during the interim-measures period, inspections will be made weekly well as after rainfall events of one-half inch or greater.

e. Section 6: See DEP Rule, Chapter 62-302 FAC, concerning water quality standards for fresh water. Parameters such as flow, DO, pH, turbidity, hardness, TSS, Cu, Ar, Cr and dioxin should be sampled quarterly during a defined stormwater discharge event. Provide the analysis method, MDL and PQL for each parameter. As the discharge from the outfall is to Springstead Creek, provide an upstream sample location on the creek. Alachua County has sampled at site upstream of the Beazers' Ditch north of the property.

**Response:** The revised application and report includes additional sampling and specifications as requested. Beazer proposes to sample for dioxin only at the Site outfall (Outfall #1).

f. Appendix A. Explain why the 3 inch and 4 inch rain event was used, as the SJRWMD rainfall intensity figure uses 6.0 inches (for a 10 yr 24 hr storm) and 9.0 inches (for a 100 yr 24 hr storm).

**Response:** After the proposed improvements are implemented, the Site will have significantly less runoff than the current condition for all storm events. The intensity values used in the runoff volume calculations are for illustration and are based on the time-of-concentration values before and after implementation of Site improvements using the procedures described in the Florida DOT Drainage Manual (Technical Release 55; relevant section included in Appendix A of the report). The conclusions and design are the same regardless of whether SJRWMD or FDOT rainfall intensity assumptions are used. As part of interim measures at the Site, Beazer is removing the equipment, roofs and bare-ground area, and replacing this area with grass surface to increase evapotranspiration, decrease the velocity of overland sheet flow, and decrease runoff volume. After implementation of the proposed improvements, the Site will have minimal impervious areas. Therefore, water quality considerations are the key design element; not runoff volume.

Stormwater runoff flow/volume calculations made for the final remedial design for the Site will be consistent with all FDEP rules and regulations including 62-302 FAC, 62-620 FAC, and 62-330 FAC using the SJRWMD Applicant's Handbook for Management and Storage of Surface Waters.

g. Appendix A. Normally the design basis would be either 1.5 inch over the entire area, or 2.5 inch over the imperious area plus 0.5 inch over the total area. The recovery would be within 72 hours.



**Response:** This sizing calculation will be appropriate for final design. For the interim measures, a 1.5 acre-ft impoundment area was judged to be appropriate to retain the first flush of stormwater (half inch runoff over 36 acres) and provide sediment settling to mitigate releases of constituents.

*h.* Based on the design is the berm height adequate? It appears to be designed for a 2 year 24 hour storm.

**Response:** The design will be sufficient to retain the runoff from the first half inch of runoff: 1.5 ac-ft. This is expected to result in sediment settling and reduction in migration of constituents.

*i.* The berm appears to end several hundred feet prior to the North property boundary. What stormwater controls will be provided north of the proposed berm? Include a topographic map indicating the direction of flow of the storm water onsite, especially in the northern section.

**Response:** The area north of the berms is a very small area compared to the areas upgradient of the berms. The following measures will be taken north of the berm:

- [1] Bare-ground areas will be root-raked and seeded;
- [2] Silt fence will be installed and maintained around the perimeter; and
- [3] The ground surface will be graded, if/as necessary, to ensure that stormwater flows into the main drainage ditch south of Outfall 1.

A topographic contour map of the Site is included with the revised application. Please note that the topographic survey information is not recent and may be inaccurate in some locations. A topographic survey is planned as part of berm construction.

j. Surface soils have contamination. Due to the presence of substances in the soils on-site, discuss how grading, excavating efforts for initial construction and normal maintenance activities will minimize expose of substances to be airborne or discharge to storm water. Detail the various seasonal levels of ground water on-site and determine the mean seasonal high ground water level. Due to the variation of site slope and varied groundwater levels, a grid of the ground water elevations would be needed to determine if ground water is or will intersect the ditch or the proposed swales. If soils are excavated, what procedures will be conducted to test soil and where will the removed soil be placed or stored? Will off-site soils be brought to the site? Provide specifications for soils proposed to be applied to the site.

**Response:** During grading and maintenance activities, a water truck will be used to keep soils moist and prevent generation of dust. The swales and berms that are created will be sodded immediately to minimize sediment generation.

Water levels in Surficial Aquifer (water-table) monitoring wells have been measured annually or semi-annually as part of the Site groundwater monitoring program since 1995. Even at the time of highest measured water levels, the water levels and the interpreted water-table surface were over three feet below ground in most Site areas including areas where the swales are to be constructed. The exception is at the northern end of the main drainage ditch. This drainage ditch, which incises five to ten feet deep, is typically dry; however, groundwater may discharge to this drainage ditch during periods with an extremely high water table.

The swales will be constructed less than three feet deep on the banks of the main ditch and will not intercept the water table or receive groundwater. Groundwater that may report to the main ditch (under current conditions as well as after improvements are implemented) is being addressed as part of other interim measures (e.g. the Surficial Aquifer groundwater containment and treatment system) and will be addressed further in the final remedial actions for the Superfund Site.



Soils will not be excavated but will be displaced (pushed) short distances when creating the swales. Clean off-Site soil will be brought on Site for constructing the berms. This imported soil will be a standard structural fill material (sand/silt/clay mixture) suitable for berm construction.

3. The interim site improvements, proposed design and a time table for completion can be made a permit schedule requirement. Provide the time table for the design and implementation of construction of site improvements.

**Response:** The design documented in the revised *Preliminary Stormwater Design Report* is sufficient for construction. Beazer will implement the Site improvements within three months of approval.

4. It is proposed that a meeting be held at the DEP Jacksonville office on Wednesday, July 14 at 10:00 am to discuss the response to this letter, the draft Consent Order and to timely address all needed information to resolve issues and complete the permit application.

**Response**: This meeting was held on July 14, 2010. The responses presented in this letter were discussed as well as the draft Consent Order.

# **Other Changes to the Application and Report**

Additional changes have been made to the permit application and *Preliminary Stormwater Design Report* to address comments made by other reviewers (FDEP Waste Management Division, ACEPD, and City of Gainesville). While many of those comments were similar to those presented in the RAI letter, there were a few additional items that needed to be addressed or clarified. The changes made in response to comments from other reviewers include:

- It is noted in the report that root-raking/disking and seeding will not take place where a good stand of vegetation currently exists. In such areas, the existing vegetation will be maintained.
- It is noted that the new grass will be maintained through frequent inspection and application of water, fertilizer, and/or additional seed as required.
- It is noted that the bare ground over much of the Site is not impervious and that root raking/disking operations will only affect the top few inches of hardened soil. Infiltration is not expected to increase significantly; evapotranspiration is expected to increase significantly.
- It is noted that displacement of surface soils during implementation will be minimal. The implementation should not have a significant effect on soil concentrations, and is not intended as remediation of surface soils.
- It is noted that the Surficial Aquifer groundwater extraction system withdrawal rates for the perimeter wells will be reevaluated after installation of the stormwater measures to ensure that any changes in groundwater concentrations are addressed. The impoundments and almost all of the root-raking/disking operations will be upgradient of the existing groundwater extraction wells.



# Closing

Beazer believes that implementation of the proposed stormwater and dust controls will be an immediate positive beneficial action at the Site. Beazer is committed to addressing FDEP concerns and obtaining the necessary approvals for implementation in a timely manner.

If you require additional information, please feel free to contact Mitchell Brourman or me.

Sincerely,

W. Com

Gregory W. Council, P.E. Principal Engineer

cc: Scott Miller, USEPA Kelsey Helton, USEPA John Mousa, ACEPD Fred Murry, City of Gainesville Mitchell Brourman, Beazer William Musser, Tetra Tech





# WASTEWATER FACILITY OR ACTIVITY PERMIT APPLICATION FORM 1 GENERAL INFORMATION

This form must be completed by all persons applying for a permit for a wastewater facility or activity under Chapter 62-620, F.A.C. See Form 1 to determine which other application forms you will need.

# DESCRIPTION OF PERMIT APPLICATION FORMS

Form 1 - General information. This booklet includes general information on applying for a permit for a wastewater facility or activity under Chapter 62-620, Florida Administrative Code (F.A.C.). Form 1 is required for all permit applications.

Form 2 - Specific information. This group of forms includes the specific information required for the type of wastewater facility or activity for which a permit is needed. Select the appropriate form(s) to be submitted with Form 1.

- > Form 2A Domestic Wastewater Facilities.
- Form 2B Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities.
- Form 2CS -Industrial Wastewater Facilities (discharging process wastewater to surface waters).
- > Form 2CG -Industrial Wastewater Facilities (discharging process wastewater to ground water).
- Form 2ES -Industrial Wastewater Facilities (discharging non-process wastewater to surface waters).
- Form 2EG -Industrial Facilities (discharging non-process wastewater to ground water).
- Form 2F Stormwater Discharge Associated with Industrial Activity
- Form 2CR -Non-Discharging/Closed Loop Recycle System.

# SECTION A - GENERAL INSTRUCTIONS

#### Who Must Apply:

Persons who are or are going to discharge wastewater to waters of Florida or the United States must file for and be granted a permit under Sections 403.087, 403.088, or 403.0885, Florida Statutes (F.S.). Persons that discharge stormwater associated with industrial activity to surface waters of the state must file for and be granted a permit under Section 403.0885, F.S. There are severe penalties for discharging without a permit.

There are some exceptions to this requirement. Discharges of domestic sewage from vessels and discharges from properly operating marine engines are not required to have a permit under the laws listed above. However, discharges of rubbish, trash, garbage or other such materials discharged overboard do require permits. Vessels operated in a capacity other than as a means of transportation are required to have a permit if they are discharging to waters. These types include vessels used as an energy or mining facility, a storage facility, a seafood processing facility, or an anchored facility for the purpose of mineral or oil exploration or development.

The introduction of sewage, industrial wastes, or other pollutants into a domestic wastewater treatment facility does not need a permit under Sections 403.087, 403.088 or 403.0885, F.S. Persons discharging to permitted wastewater treatment facilities must comply with all applicable pretreatment standards. If a person has a plan or an agreement to switch from direct discharge into waters of the state to discharge to a domestic treatment facility, it does not relieve the person from obtaining a permit for the discharge until such time as the connection is made and the discharge is stopped.

Most discharges from agricultural and silvicultural activities to waters of the state do not require a permit under Sections 403.087, 403.088, or 403.0885, F.S. However, permits under those sections are required for discharges from concentrated animal feeding operations, concentrated aquatic animal production facilities, activities associated with approved aquaculture projects, and silvicultural point sources.

#### Where to Apply:

Permit applications must be filed with the Department of Environmental Protection (DEP) district office shown in Figure 1 for the county in which the wastewater facility or activity is located, except for permit applications for steam electrical generating power plants which are filed with the DEP office in Tallahassee. DEP offices are located at



### Figure 1. State Map Showing DEP District Offices

#### NORTHWEST DISTRICT

160 Government Center, Ste 308 Pensacola, Florida 32501-5794 Phone No. (850) 585-8300

#### SOUTHWEST DISTRICT

3804 Coconut Palm Drive Tampa, Florida 33619-8318 Phone No. (813) 744-6100

## NORTHEAST DISTRICT

7825 Baymeadows Way, Suite B-200 Jacksonville, Florida 32256-7577 Phone No. (904) 448-4300

### CENTRAL DISTRICT

3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Phone No. (407) 894-7555

#### SOUTH DISTRICT

2295 Victoria Avenue, Suite 364 Fort Myers, Florida 33901 Phone No. (239) 332-6975

### SOUTHEAST DISTRICT

400 North Congress Avenue West Palm Beach, Florida 33401 Phone No. (561) 681-6600

#### When to Apply:

Applications must be filed with the appropriate DEP office 180 days before your current permit expires or 180 days before startup of a new or modified facility. If the submitted application is for a new facility or for a modification of an existing facility, the information required for describing the construction must be filed at least 90 days before construction begins. The DEP encourages applicants to file the materials describing the construction of a new facility or the modification of an existing facility as early as possible to avoid problems with delays in startup or facility redesign to achieve effluent limitations.

Federal regulations provide that a new source in the NPDES program may not be constructed or started to be constructed before the issuance of an operation permit. Because of this regulation, a permit application for a new source may need to be submitted well in advance of the required 180 days.

#### Fees:

Application fees are listed in Section 62-4.050, Florida Administrative Code (F.A.C.). An application will not be processed until the application fee has been paid. If the DEP determines that a permit should be issued for less than five years duration, the application fee will be pro rated.

If a permit is issued for a surface water discharge, the permittee will be assessed a regulatory and surveillance program fee annually. Those fees are listed in Section 62-4.052, F.A.C. Failure to pay the annual fee may result in revocation of the permit.

#### Availability of Information to the Public:

Information contained in these applications forms will, upon request, be made available to the public for inspection and copying. However, you may request confidential treatment for certain information which you may submit to supplement the information requested on these forms. Section 62-620.302, F.A.C., and 40 CFR 2 provide set forth the procedures for making the claim. No information on Forms 1 and 2A through 2EG may be claimed as confidential.

#### **Completion of Forms:**

Unless otherwise specified in instructions to the forms, each item in each form must be answered. To indicate that each item has been considered, enter "NA", for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity.

If you have previously submitted information to the DEP which answers a question, you may either repeat the information in the space provided or attach a copy of the previous submission. DO NOT WRITE "ON FILE". Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

# SECTION B - FORM 1 LINE-BY-LINE INSTRUCTIONS

#### This form must be completed by all applicants.

#### **Completing This Form:**

Please type or print in the underlined areas only. Some items have a limited number of spaces or characters so that your response may be entered into a computer program. Please do not exceed this maximum number with your response. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response.

#### Item I

Space is provided at the upper right hand corner of Form 1 for insertion of your Facility Identification Number. If you have an existing facility, enter your identification number. If you don't know your identification number, please contact the appropriate DEP office which will provide you with your number. If your facility is new (not yet constructed), leave this item blank.

#### Item II

Answer each question to determine which supplementary forms you need to fill out. Be sure to check the glossary in Section C of these instructions for the legal definitions of any words you are not certain of their meaning.

If you answer "no" to every question, then you may not need a permit. However, you should call the appropriate district office to determine if you have made a correct determination. If you answer "yes" to any question, then you must complete and file the supplementary form by the deadline listed in Section A along with this form.

#### Item III

Enter the facility's official or legal name. Do not use a colloquial name.

#### Item IV

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility, with the facts reported in this application, and who can be contacted by reviewing offices if necessary.

#### Item V

Give the complete mailing address of the office where correspondence should be sent. This often is not the address used to designate the location of the facility or activity.

#### Item VI

Give the address or location of the facility identified in Item III of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (for example, section number or quarter section number from county records or at intersection of Rts 426 and 22).

#### Item VII

List four, in descending order of significance, 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the discharge from the facility.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Your local library may have a copy of this publication which you may use. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, please contact the appropriate DEP district office.

#### Item VIII-A

Give the name, as it is legally referred to, of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. Do not use a colloquial name.

#### Item VIII-B

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

#### Item VIII-C

Enter the appropriate letter to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by a local government, such as a city, town, county, etc.

#### Items VIII-D through H

Enter the telephone number and address of the operator identified in Item VIII-A.

#### Item IX

Indicate whether the facility is located on Indian Lands.

#### Item X

Give the number of each presently effective wastewater and stormwater permit issued to the facility listed in this application. List relevant federal, state, and local permits. DO NOT LIST ALL YOUR PERMITS. LIST ONLY CURRENT ENVIRONMENTAL PERMITS RELATING TO THIS PROJECT.

#### Item XI

Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

> The legal boundaries of the facility;

- > The location and serial number of each of your existing and proposed intake and discharge structures;
- > All hazardous waste management facilities;
- Each well where you inject fluids underground; and
- All springs and surface water bodies in the area, plus all drinking water wells within 1/4 mile of the facility which are identified in the public record or otherwise known to you.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey. If a 7-1/2 minute series map has not been published for your facility site, then you may use a 15 minute series map from the U.S. Geological Survey. If neither a 7-1/2 nor 15 minute series map has been published for your facility site, use a plat map or other appropriate map, including all the requested information; in this case, briefly describe land uses in the map area (for example, residential, commercial).

You may trace your map from a geological survey chart, or other map meeting the above specifications. If you do, your map should bear a note showing the number or title of the map or chart from which it was traced. Include the names of nearby towns, water bodies, and other prominent points.

You may obtain a topographic map from:

Eastern Mapping Center National Cartographic Information Center U.S. Geological Survey 536 National Center Reston, VA 22092

#### Item XII

Briefly describe the nature of your business (for example, products produced or services provided).

#### Item XIII

Section 403.161, F.S., provides severe penalties for submitting false information on this application form or any reports or records required by a permit, if issued. There are both civil and criminal penalties, in addition to the revocation of the permit.

Rule 62-620.305, F.A.C., requires that the application and any reports required by the permit, if issued, to be signed as follows:

A. For a corporation, by a responsible corporate officer as described in Rule 62-620.305, F.A.C.;

- B. For partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- C. For a municipality, state, federal or other public facility, by a principal executive officer or elected official.

# SECTION C - GLOSSARY

NOTE: This Glossary includes terms used in the instructions and in Forms 1, 2A through 2EG. If you have any questions concerning the meaning of any of these terms, please contact your DEP district office.

Activity means any action which results in a discharge of wastes into waters of the State or that is reasonably expected to be a source of water pollution.

Aliquot means a sample of specified volume used to make up a total composite sample.

Animal Feeding Operation means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

A. Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and

B. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

- Animal Unit means a unit of measurement for any animal feeding operation calculated by adding the following number: The number of slaughter and feeder cattle multiplied by 1.0; plus the number of mature dairy cattle multiplied by 1.4; plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4; plus the number of sheep multiplied by 0.1; plus the number of horses multiplied by 2.0.
- **Application** means the approved DEP standard forms for applying for a permit, including any approved additions, revisions, or modifications to the forms. Approved forms are numbered, Form 62-620.910, and have an effective date of October 1, 1994, or later.
- Aquifer means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.
- **Best Management Practices (BMP)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- **Biological Monitoring Test** means any test which include the use of aquatic algal, invertebrate, or vertebrate species to measure acute or chronic toxicity, and any biological or chemical measure of bioaccumulation.
- Bypass means the intentional diversion of wastes from any portion of a treatment facility.
- **Concentrated Animal Feeding Operation** means an animal feeding operation which meets the criteria set forth in Chapter 62-670, F.A.C.
- **Concentrated Aquatic Animal Production Facility** means a hatchery, fish farm, or other facility which contains, grows or hold aquatic animals as set forth in Chapter 62-660, F.A.C.

- **Contact Cooling Water** means water used to reduce temperature which comes into contact with a raw material, intermediate product, waste product other than heat, or finished product.
- CWA means the Clean Water Act as amended, 33 U.S.C. 1251 et seq.
- **Dike** means any embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.
- **Discharge (of a Pollutant)** means any addition of any pollutant or combination of pollutants to waters of the State from any point source; or any addition of any pollutant or combination of pollutants to the marine waters of the State from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the State from surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by the State, a municipality, or other person which do not lead to POTWs; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharge.

- **Effluent Limitation** mean any restriction imposed by the DEP on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the State.
- **Effluent Limitation Guideline** means a regulation published under Section 304(b) of the Clean Water Act to adopt or revise effluent limitations.
- **EPA** means the United States Environmental Protection Agency.

Existing Source or Existing Discharger means any source which is not a new source or a new discharger.

- **Facility** or wastewater facility means any facility which can reasonably be expected to be a source of pollution and includes any or all of the following: a collection and transmission system, a wastewater treatment works, a reuse or disposal system, and a residuals management facility.
- Ground Water means water below the land surface in a zone of saturation.
- Indirect Discharger means an industrial discharger introducing pollutants to a publicly owned treatment works.
- Injection Well mean a well into which fluids are injected.
- **MGD** means millions of gallons per day.
- **Municipality** means a city, village, town, borough, county, district, association, or other public body created by or under State law and have jurisdiction over disposal of sewage, industrial wastes, or other wastes.
- **National Pollutant Discharge Elimination System (NPDES)** means the national program for issuing, modifying, revoking and reissuing, termination, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA. The term includes a State program which has been authorized by EPA under 40 CFR Part 123.

- **New Discharger** mean any building, structure, facility, or installation: (A) from which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) which has never received a finally effective NPDES permit for discharges at that site; and (C) which is not a "new source." This definition includes an indirect discharger which commences discharging into water of the State. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.
- **New Source** means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced: (A) after promulgation of standards of performance under Section 306 of the CWA which are applicable to such source; or (B) after proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.
- **Non-Contact Cooling Water** means water used to reduce temperature which does not come into direct contact with any raw material, intermediate produce, waste product (other than heat), or finished product.

Off-Site means any site which is not "on-site."

**On-Site** means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Non-contiguous properties owned by the same person, but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property.

**Operator** means the person responsible for the overall operation of a facility.

**Outfall** means a point source.

- **Owner** means the person who owns a facility or part of a facility.
- **Permit** means an authorization, license, or equivalent control document issued by the State to implement the requirements of 40 CFR 122, 123, and 124 and Chapter 403, F.S.
- **Point Source** means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- **Pollutant** means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agriculture waste discharged into water. It does NOT mean: (A) sewage from vessels; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

- **Privately Owned Treatment Works** means any device or system which is used to treat domestic wastewater from any facility which is not a POTW.
- **Process Wastewater** means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
- **Publicly Owned Treatment Works (POTW)** means any device or system used in the treatment (including recycling and reclamation) of domestic sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.
- **Residuals** means the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater. Not included are solids removed from pump stations and lift stations, and screenings and grit removed from the headworks of domestic wastewater treatment facilities. Also not included are other solids removed prior to treatment of the residuals to meet the stabilization standards of Chapter 62-640, F.A.C., or ash generated during the incineration of residuals.

Sewage From Vessels means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of the CWA.

Sewage Sludge means residuals.

Silvicultural Point Source means any discernable, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into water of the State.

Stormwater Discharge Associated with Industrial Activity is as defined in 40 CFR 122.26(b)(14).

**Surface Impoundment or Impoundment** means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

Toxic Pollutant means any pollutant listed as toxic under Section 307(a)(1) of the CWA.

- **Upset** means an exceptional incident in which there is unintentional and temporary noncompliance with technologybased permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- Waters of the State means the waters defined in Section 403.031, F.S., and including waters of the United States to the seaward boundaries of the State.



# WASTEWATER FACILITY OR ACTIVITY PERMIT APPLICATION FORM 1 GENERAL INFORMATION

#### **I - IDENTIFICATION NUMBER:**

Facility ID

FLR05B160

#### **II - CHARACTERISTICS:**

INSTRUCTIONS: Complete the questions below to determine whether you need to submit any permit application forms to the Department of Environmental Protection. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the blank in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements. See Section B of the instructions. See also, Section C of the instructions for definitions of the terms used here.

| SPECIFIC QUESTIONS   | YES | NO | FORM<br>ATTACHED |
|--|-----|----|------------------|
| A. Is this facility a domestic wastewater facility which results in a discharge to surface or ground waters?   |     | X  |                  |
| B. Does or will this facility (either existing or proposed)<br>include a concentrated animal feeding operation or aquatic animal<br>production facility which results in a discharge to waters?                        |     | Х  |                  |
| C. Does or will this facility (other than those describe in A. or B.) discharge process wastewater, or non-process wastewater regulated by effluent guidelines or new source performance standards, to surface waters? |     | X  |                  |
| D. Does or will this facility (other than those described in A. or B.) discharge process wastewater to ground waters?  |     | X  |                  |
| E. Does or will this facility discharge non-process wastewater, not regulated by effluent guidelines or new source performance standards, to surface waters?   |     | X  |                  |
| F. Does or will this facility discharge non-process wastewater to ground waters?   |     | Х  |                  |
| G. Does or will this facility discharge stormwater associated with industrial activity to surface waters?  | Х   |    | Form 2F          |
| H. Is this facility a non-discharging/closed loop recycle system?  |     | Х  |                  |
| I. Is this facility a public water system whose primary purpose is the production of potable water for public consumption and which discharges demineralization concentrate to surface water or groundwater?           |     | X  |                  |

### III - NAME OF FACILITY: (80 characters and spaces)

Beazer East, Inc. - Gainesville, FL

#### IV - FACILITY CONTACT: (A. 30 characters and spaces)

| A. Name and Title (Last, first, & title) | B. Phone (area code & no.) |
|--|----------------------------|
| Mitchell Brourman                        | (412) 208-8805             |

#### V - FACILITY MAILING ADDRESS: (A. 30 characters and spaces; B. 25 characters and spaces)

| A. Street or P.O. Box: One Oxford Center, Suite 3000 |           |                 |  |  |  |
|--|-----------|-----------------|--|--|--|
| B. City or Town: Pittsburgh                          | State: PA | Zip Code: 15219 |  |  |  |

**VI - FACILITY LOCATION:** (A. 30 characters and spaces; B. 24 characters and spaces; C. 3 spaces (if known); D. 25 characters and spaces; E. 2 spaces; F. 9 spaces)

| A. Street, Route or Other Specific Identifier: 200 NW 23rd Avenue |                            |                    |  |  |  |
|---|----------------------------|--------------------|--|--|--|
| B. County Name: Alachua   | C. County Code (if known): |                    |  |  |  |
| D. City or Town: Gainesville                                      | E. State: FL               | F. Zip Code: 32609 |  |  |  |

#### VII - SIC CODES: (4-digit, in order of priority)

| 1. Code #: 9995 | (Specify) Non-operating | 2. Code #: 2491 | (Specify) frm:Wood Pres |
|-----------------|-------------------------|-----------------|-------------------------|
| 3. Code #: NA   | (Specify)               | 4. Code #: NA   | (Specify)               |

**VIII - OPERATOR INFORMATION:** (A. 40 characters and spaces; B. 1 character; C. 1 character (if other, specify); D. 12 characters; E. 30 characters and spaces; F. 25 characters and spaces; G. 2 characters; H. 9 characters)

| A. Name: Beazer East, Inc.  | B. Is the name in VIII A. the owner?   |                    |                                 |  |  |  |
|---|--|--------------------|---------------------------------|--|--|--|
| C. Status of Operator:<br>F = Federal; S = State; P = Private;<br>O = Other; M = Public (other than F or S) | C. Status of Operator:(code) $F = Federal; S = State; P = Private; D = Other; M = Public (other than F or S)P$ |                    | D. Phone No.:<br>(412) 208-8805 |  |  |  |
| E. Street or P. O. Box: One Oxford Center, Suite 3000   |  |                    |                                 |  |  |  |
| F. City or Town: Pittsburgh   | G. State: PA   | H. Zip Code: 15219 |                                 |  |  |  |

#### IX - INDIAN LAND:

| A. Is the facility located on Indian lands? | 🗌 Yes | 🖾 No |
|---|-------|------|
|---|-------|------|

FLR05B160

#### **X - EXISTING ENVIRONMENTAL PERMITS:**

| A. NPDES Permit No. B. UIC Permit No. |    | C. Other (specify) | D. Other (specify) |  |
|---------------------------------------|----|--------------------|--------------------|--|
| NA                                    | NA | NA                 | NA                 |  |

XI - MAP: Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII - NATURE OF BUSINESS (provide a brief description)

Inactive Industry. The industial permit is to cover the transition period from a former timber treatment facility to implementation of a site-wide environmental remedy under the CERCLA (Superfund) process, which will include site-wide stormwater management controls consistent with site re-use.

#### XIII - CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

> Robert Markwell A. Name (type or print)

B. Signature

Vice President Official Title (type or print)

C. Date Signed



# APPLICATION FORM 2F

PERMIT TO DISCHARGE STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITY

# **INSTRUCTIONS FOR FORM 2F**

#### Who Must File Form 2F

DEP Form 62-620.910(8) (Form 2F) must be completed by owners or operators of facilities or activities that have stormwater discharge associated with industrial activity to surface waters of the state and for which such discharge is n ot o therwise covered by a State of Florida generic permit.

In addition to Form 2F,

a. o wners or o perators that have s tormwater d ischarge a ssociated with in dustrial a ctivity at a facility which discharges process wastewater to surface water must complete and submit DEP Forms 62-620.910(1) and (5) (Forms 1 and 2CS). (See Rule 62-620.200, F.A.C., for a definition of process wastewater.)

b. o wners or o perators that have stormwater d ischarge as sociated with industrial activity at a facility which discharges process wastewater to ground water must complete and submit DEP Forms 62-620.910(1) and (4) (Forms 1 and 2CG).

c. owners or operators that have stormwater discharge associated with industrial activity at a facility which discharges non-process wastewater to surface water must complete and submit DEP Forms 62-620.910(1) and (7) (Forms 1 and 2ES). (See Rule 62-620.200, F.A.C., for a definition of non-process wastewater.)

d. owners or operators that have stormwater discharge associated with industrial activity at a facility which discharges nonprocess wastewater to ground water must complete and submit DEP Forms 62-620.910(1) and (6) (Forms 1 and 2EG).

e. owners or operators that have stormwater discharge associated with industrial activity from a domestic wastewater facility must c omplete and s ubmit DEP Forms 62-620.910(1) and (2) (Forms 1 and 2A). (See Rule 62-620.200, F.A.C., for a definition of domestic wastewater facility.)

#### Where to File Applications

The application forms should be sent to the appropriate Department office listed in Form 1.

#### Completeness

Your application will not be considered complete unless you answer every question on this form and the other forms listed above. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

#### Public Availability of Submitted Information

You may not claim as confidential any information required by this form or the other required forms, whether the information is reported on the forms or in an attachment. Chapter 119, F.S., requires that all permit applications be made available to the public upon request. Any information, except effluent data, you submit to the Department which goes beyond that required by the forms listed above may be claimed as confidential if the requirements of 40 CFR 2 are met. If you do not assert a claim of confidentiality at the time of submitting the information, the Department may make the information public without further notice to you.

#### Definitions

"Stormwater discharge associated with industrial activity" is as defined in 40 CFR 122.26(b)(14).

"Material handling activities" means the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate

from the industrial activities as long as the drainage from the excluded areas is not mixed with stormwater drained from the described areas.

"Significant materials" means raw materials, fuels, solvents, detergents, plastic pellets, finished materials, metallic products, raw materials used in food processing or production, hazardous substances designated under section 101(14) of CERCLA, any chemical the facility is required to report pursuant to section 313 of title III of SARA, fertilizers, pesticides, waste products, ashes, slag and sludge that have the potential to be released with stormwater discharges.

Additional significant terms used in these instructions and in the form are defined in the glossary found in Form 1 or in Chapters 62-600, 62-620, or 62-660, F.A.C.

#### **ID** Number

Fill in your identification number at the top of each odd-numbered page of Form 2F. You may copy this number directly from Form 1. If you are applying for the initial permit for your facility or activity and do not have an identification number, leave this item blank and the Department will assign a number.

#### Item I

Determine the latitude and longitude of each of your outfalls and the name of the receiving water. If your stormwater is combined with domestic, process or non-process industrial wastewater, indicate which of the outfalls identified on Form 2A, 2CS or 2ES will contain the combined wastewater.

#### Item II-A

If the answer to this question is yes, complete all parts of the chart, or attach a copy of any previous submission you have made to the Department containing the same information.

#### Item II-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

#### Item III

Attach a site map showing topography depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each stormwater outfall;

paved areas and buildings within the drainage area of each stormwater outfall, each known past or present areas used for outdoor storage or disposal of s ignificant m aterials, e ach e xisting s tructural c ontrol m easure to r educe p ollutants in stormwater runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive stormwater discharges from the facility.

#### Item IV-A

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where stormwater runs off at rates that are significantly higher than b ackground r ates ( for ex ample, p re-development l evels) and i nclude p aved ar eas, b uilding r oofs, p arking l ots, and roadways. Include an estimate of the total area, including all impervious and pervious areas, drained by each outfall. The site map required under Item III can be used to estimate the total area drained by each outfall.

#### Item IV-B

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to stormwater; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three y ears, t o minimize contact by these materials with stormwater runoff; materials loading and access areas and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. S ignificant materials should be identified by chemical name, form (powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together.

#### Item IV-C

For each outfall, structural controls include structures which enclose material handling or storage areas covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Non-structural c ontrols in clude p ractices s uch a s s pill p revention p lans, employee training, visual inspections, preventive maintenance, and housekeeping measure that are used to prevent or minimize the potential for releases of pollutants.

#### Item V

Provide a certification that all outfalls that should contain stormwater discharge associated with industrial activity have been tested or evaluated for the presence of non-stormwater discharges which are not covered by an wastewater permit under Rule 62-620, F.A.C. T ests for such non-stormwater discharges m ay include s moke t ests, fluorometric d ye t ests, an alysis o f accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during a test. All non-stormwater discharges must be identified in the appropriate form from the "Form 2" series which must accompany this application.

#### Item VI

Provide a d escription of e xisting in formation r egarding the h istory of s ignificant le aks or s pills of to xic or h azardous pollutants at the facility in the last three years.

#### Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

#### General Instructions for Item VII-A, B, and C

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C requires you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your

raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and by-products, and any previous analyses known to you of your effluent or similar effluent.

**A. Sampling:** The collection of the samples for the reported analyses shall be in accordance with 40 CFR 136 and Rule 62-160, F.A.C. A ny specific r equirements contained in t he ap plicable an alytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes, or as soon thereafter as practicable, of the discharge must be used. For all other pollutants both a grab sample co llected during the first 30 m inutes, or as s oon thereafter as practicable, of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample shall be taken during the first 30 minutes, or as soon thereafter as practicable, and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

**Grab sample:** An individual sample of at least 100 milliliters collected during the first 30 minutes, or as soon thereafter as practicable, of the discharge. This sample is to be analyzed separately from the composite sample.

**Flow-Weighted Composite sample:** A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of 15 minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected m anually or a utomatically. W here G C/MS V olatile O rganic A nalysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that all data requirements are met; sampling was done no more than three years before submission; and all data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in stormwater treatment. The Department may request additional information, including current quantitative data, if it is necessary to assess your discharges. The Department may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the protocols for collecting samples under 40 CFR 136 or Rule 62-160, F.A.C., and additional time for submitting data on a case-by-case basis.

**B. Reporting:** All levels must be reported as concentration and mass. Grab samples are reported in terms of concentration. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if separate sheets contain all the required information in a format which is consistent with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the abbreviations listed below in the columns headed "Units."

| Concentration              |  |                                  | Mass  |
|----------------------------|--|----------------------------------|---|
| ppb<br>ppm<br>mg/L<br>ug/L | parts per billion<br>parts per million<br>milligrams per liter<br>micrograms per liter | lbs<br>ton<br>mg<br>g<br>kg<br>T | pounds<br>tons (English tons)<br>milligrams<br>grams<br>kilograms<br>tonnes (metric tons) |

All reporting of values for metals must be in terms of "total recoverable metal," unless

(1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or

(2) All approved analytical methods for the metal inherently measure only its dissolved form; or

(3) The Department has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provision of the CWA. If you measure only one grab sample and one flow-weighted composite sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into "Number of Storm Events Sampled" column. The Department may require you to conduct a dditional a nalyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are r epresentative of y our d ischarge, y ou must r eport them. Y ou must d escribe y our m ethod of t esting and d ata analysis. Y ou also must determine the average of all values within the last year and report the concentration and mass under the "Average Values" columns, and the total number of storm events samples under the "Number of Storm Events Sampled" columns.

**C. Analysis:** You must use test methods promulgated in 40 C FR 136 or Rule 62-160, F.A.C.; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission to sample and analyze only one outfall and submit the results of the a nalysis f or o ther s ubstantially identical o utfalls. I f your request is granted by the Department, on a s eparate s heet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

### Part VII-A

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first 30 minutes, or as soon thereafter as practicable, of the discharge and flowweighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General instructions to I tem VII for definitions of grab sample collected during the first 30 minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

#### Part VII-B

List all pollutants that are limited in an effluent guideline which the facility is subject to or a ny pollutant listed in the wastewater permit for the facility if the facility is operating under an existing wastewater permit. Complete one table for each outfall. The "Average Values" column is not compulsory but should be filled out if data are available. Analyze a grab sample for all pollutants in this Part, and report the results, except as provided in the General Instructions.

#### Part VII-C

Part VII-C must be completed by all applicants for all outfalls which discharge stormwater associated with industrial activity. Use both a g rab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

**Table 2F-2:** For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged, except pollutants p reviously listed in P art V II-B. I f a pollutant is limited in an effluent guideline limitation for the facility, the pollutant m ust b e an alyzed and r eported in Part VII-B. I f a pollutant in T able 2 F-2 is in directly limited by a n e ffluent guideline limitation through an indicator (e.g., TSS used as an indicator to control the discharge of iron and aluminum), you must analyze for it and report the data in Part VII-B. For other pollutants listed in Table 2F-2, those not limited directly or indirectly by an effluent limitation guideline, that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

**Table 2F-3:** For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein; acrylonitrile; 2,4 dinitrophenol; and 2-methyl-4, 6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged in concentrations 100 ppb or greater. For every pollutant expected to be discharged in concentrations loss than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

**Table 2F-4:** For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. Certain d ischarges of h azardous s ubstances m ay be exempted from the r equirements of s ection 3 11 of the CWA which establishes reporting requirements. Please contact the Department for further information.

#### Part VII-D

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration report in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method o f f low m easurement, o r estimation. P rovide th e d ata a nd d uration o f th e s torm e vent(s) s ampled, r ainfall measurement, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

#### Part VII-E

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or by-product. In addition, if you know or have reason to believe that 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD) is discharged, or if you use or manufacture 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 3, 4,5,-TP); 2 -(2,4,5-trichlorophenoxy) e thyl, 2 ,2-dichloropropionate (E rbon); O ,O-dimethyl O -(2,4,5-trichlorophenol); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Department may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each

toxic pollutant and the Department has a dequate in formation to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

#### Item VIII

Self explanatory. The Department may ask you to provide additional details after your application is received.

### Item X

Chapter 403, F.S., provides for severe penalties for submitting false information on this application form. Rule 62-620.305, F.A.C., requires the certification in this item to be signed by an appropriate and responsible authority. If the certification is not signed in accordance with this rule, the application will be deemed incomplete and returned.

# TABLE 2F-1 **CODES FOR TREATMENT UNITS**

#### **Physical Treatment Processes**

- 1-A Ammonia Stripping
- 1-B Dialysis
- 1-C Diatomaceous Earth Filtration
- 1-D Distillation
- 1-E Electrodialysis
- 1-F Evaporation
- 1-G Flocculation
- 1-H Flotation
- 1-I Foam Fractionation
- 1-J Freezing
- 1-K Gas-Phase Separation
- 1-L Grinding (Comminutors)
- 1-M Grit Removal

- 1-N Microstraining
- 1-0 Mixing
- 1-P Moving Bed Filters
- 1-Q Multimedia Filtration
- 1-R Percolation Pond
- 1-S Rapid Sand Filtration
- 1-T Reverse Osmosis (Hyperfiltration)
- 1-U Screening
- 1-V Sedimentation (Settling)
- 1-W Slow Sand Filtration
- 1-X Solvent Extraction

2-G Disinfection (Ozone)

2-H Disinfection (Other)

2-J Ion Exchange

3-E Pre-Aeration

2-L Reduction

2-K Neutralization

2-I Electrochemical Treatment

1-Y Sorption

#### **Chemical Treatment Processes**

- 2-A Carbon Adsorption
- 2-B Chemical Oxidation
- 2-C Chemical Precipitation
- 2-D Coagulation
- 2-E Dechlorination
- 2-F Disinfection (Chlorine)
  - **Biological Treatment Processes**
- 3-A Activated Sludge
- 3-B Aerated Lagoons
- 3-C Anaerobic Treatment
- 3-D Nitrification-Denitrification
- 3-G Stabilization Ponds 3-H Trickling Filtration
- **Other Processes**
- 4-A Discharge to Surface Water
- 4-B Ocean Discharge Through Outfall
- 4-C Reuse/Recycle of Treated Effluent

3-F Spray Irrigation/Land Application

4-D Underground Injection

#### Sludge Treatment and Disposal Processes

5-A Aerobic Digestion
5-B Anaerobic Digestion
5-C Belt Filtration
5-D Centrifugation
5-E Chemical Conditioning
5-F Chlorine Treatment
5-G Composting
5-H Drying Beds
5-I Elutriation
5-J Flotation Thickening
5-K Freezing
5-L Gravity Thickening

5-M Heat Drying
5-N Heat Treatment
5-O Incineration
5-P Land Application
5-Q Landfill
5-R Pressure Filtration
5-S Pyrolysis
5-T Sludge Lagoons
5-U Vacuum Filtration
5-V Vibration
5-W Wet Oxidation

# TABLE 2F-2

# CONVENTIONAL AND NON-CONVENTIONAL POLLUTANTS REQUIRED TO BE TESTED BY EXISTING DISCHARGER IF EXPECTED TO BE PRESENT

Aluminum, Total Barium, Total Boron, Total Bromide Chlorine, Total Residual Cobalt, Total Color Fecal Coliform Fluoride Iron, Total Magnesium, Total Molybdenum, Total Manganese, Total Nitrate-Nitrite Nitrogen, Total Organic Oil and Grease Phosphorus, Total Radioactivity Sulfate Sulfide Sulfite Surfactants Tin, Total Titanium, Total

# TABLE 2F-3 TOXIC POLLUTANTS REQUIRED TO BE IDENTIFIED BY APPLICANT IF EXPECTED TO BE PRESENT

#### **Toxic Pollutants and Total Phenol**

Antimony, Total Arsenic, Total Beryllium, Total Cadmium, Total Chromium, Total Copper, Total Cyanide, Total Lead, Total Mercury, Total Nickel, Total

#### **GC/MS Fraction Volatiles Compounds**

Acrolein Acrylonitrile Benzene Bromoform Carbon Tetrachloride Chlorobenzene Chlorodibromomethane Chloroethane 2-Chloroethylvinyl Ether

2-Chlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol 4,6-Dinitro-O-Cresol

Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene 3,4-Benzofluroranthene Benzo(ghi)perylene Benzo(k)fluoranthene Bis(2-chloroethoxy)methane Bis(2-chloroethoxy)methane Bis(2-chloroisopropyl)ether Bis(2-chloroisopropyl)ether Bis(2-ethylyhexyl)phthalate 4-Bromophenyl Phenyl Ether Butylbenzyl Phthalate Chloroform Dichlorobromomethane 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene 1,2-Dichloropropane 1,3-Dichloropropylene Ethylbenzene Methyl Bromide Methyl Chloride

#### **Acid Compounds**

2,4-Dinitrophenol 2-Nitrophenol 4-Nitrophenol p-Chloro-M-Cresol

#### **Base/Neutral**

2-Chloronaphthalene 4-Chlorophenyl Phenyl Ether Chrvsene Dibenzo(a,h)anthracene 1.2-Dichlorobenzene 1,3-Dichlorobenzene 1.4-Dichlorobenzene 3,3-Dichlorobenzidine **Diethyl Phthalate Dimethyl Phthalate** Di-N-Butyl Phthalate 2.4-Dinitrotoluene 2,6-Dinitrotoluene Di-N-Octylphthalate 1,2-Diphenylhydrazine (as Azobenzene)

Phenols, Total Selenium, Total Silver, Total Thallium, Total Zinc, Total

Methylene Chloride 1,1,2,2-Tetrachloroethane Tetrachloroethylene 1,2-Trans,Dichloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene Vinyl Chloride

Pentachlorophenol Phenol 2,4,6-Trichlorophenol

Fluroanthene Fluorene Hexachlorobenzene Hexachlorobenzene Hexachloroethane Indeno(1,2,3-cd)pyrene Isophorone Napthalene Nitrobenzene N-Nitrosodimethylamine N-Nitrosodi-N-Propylamine N-Nitrosodiphenylamine Phenanthrene Pyrene 1,2,4-Trichlorobenzene

#### Pesticides

| Aldrin    | Dieldrin           | PCB-1242  |
|-----------|--------------------|-----------|
| Alpha-BHC | Alpha-Endosulfan   | PCB-1254  |
| Beta-BHC  | Beta-Endosulfan    | PCB-1221  |
| Gamma-BHC | Endosulfan Sulfate | PCB-1232  |
| Delta-BHC | Endrin             | PCB-1248  |
| Chlordane | Endrin Aldehyde    | PCB-1260  |
| 4,4'-DDT  | Heptachlor         | PCB-1016  |
| 4,4'-DDE  | Heptachlor Epoxide | Toxaphene |
| 4,4'-DDD  | <b>1</b>           | 1         |

# TABLE 2F-4 HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANT IF EXPECTED TO BE PRESENT

#### **Toxic Pollutant**

#### Asbestos

#### **Hazardous Substances**

Acetaldehyde Allyl alcohol Allyl chloride Amyl acetate Aniline Benzonitrile Benzyl chloride Butyl acetate Butylamine Carbaryl Carbofuran Carbon disulfide Chlorpyrifos Coumaphos Cresol Crotonaldehyde Cyclohexane 2,4-D (2,4dichlorophenoxyacetic acid) Diazinon Dicamba Dichlobenil Dichlone 2,2-Dichloropropionic acid Dichorvos Diethyl amine Dimethyl amine

Dinitrobenzene Diquat Disulfoton Diuron Epichlorohydrin Ethion Ethylene diamine Ethylene dibromide Formaldehyde Furfural Guthion Isoprene Isopropanolamine Kelthane Kepone Malathion Mercaptodimethur Methoxychlor Methylmercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethyl amine Monomethyl amine Naled Napthenic acid Nitrotoluene

Parathion Phenolsulfonate Phosgene Progargite Propylene oxide Pyrethrins Quinoline Resorcinol Stronthium Strychnine Styrene 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) TDE (Tetrachlorodiphenyl ethane) 2,4,5-TP (2-(2,4,5-Trichlorophenoxy)propanoic acid) Trichlorofan Triethylamine Trimethylamine Uranium Vanadium Vinyl acetate Xylene Xylenol Zirconium

FORM 2F



# APPLICATION FOR PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

Facility I.D. Number: FL05B160

Please type or print in black ink. If additional space is needed for your answer, use plain sheets and attach to the application form.

#### I. Outfall Location:

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

| A. Outfall Number (list) | B. Latitude |     | C. Longitude |     |     | D. Receiving Water (Name) |                   |
|--------------------------|-------------|-----|--------------|-----|-----|---------------------------|-------------------|
| 1                        | 29N         | 40' | 56.84"       | 82W | 19' | 30.51"                    | Springstead Creek |
|                          |             |     |              |     |     |                           |                   |
|                          |             |     |              |     |     |                           |                   |
|                          |             |     |              |     |     |                           |                   |
|                          |             |     |              |     |     |                           |                   |

#### **II. Improvements:**

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of stormwater or wastewater treatment equipment or practices or a ny other environmental programs which may a ffect the d ischarges described in t his application? T his in cludes, b ut is not limited to, p ermit c onditions, a dministrative or enforcement orders, enforcement c ompliance schedule l etters, stipulations, court orders, and grant or loan conditions?

| 1. Identification of   | 2. Affected Outfalls |                     | 2. Affected Outfalls |             | 3. Brief Description of Project | 4. Final Cor | npliance Date |
|------------------------|----------------------|---------------------|----------------------|-------------|---------------------------------|--------------|---------------|
| Conditions, Agreements | No.                  | Source of Discharge |                      | a. required | b. projected                    |              |               |
| NA                     |                      |                     |                      |             |                                 |              |               |
|                        |                      |                     |                      |             |                                 |              |               |
|                        |                      |                     |                      |             |                                 |              |               |
|                        |                      |                     |                      |             |                                 |              |               |
|                        |                      |                     |                      |             |                                 |              |               |
|                        |                      |                     |                      |             |                                 |              |               |

B. You may attach additional sheets describing any additional water pollution or other environmental projects which may affect your discharge that you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

#### III. Site Drainage Map:

Attach a site map showing topography depicting the facility including each of its intake and discharge structures; the drainage area of each stormwater outfall; paved areas and buildings within the drainage area of each stormwater outfall; each known past or present areas used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units; each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive stormwater discharges from the facility. Show hazardous waste storage or disposal areas that do not require a RCRA permit separate from those which do require a permit.

#### ATTACHED.

#### IV. Narrative Description of Pollutant Sources:

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces, including paved areas and building roofs, drained to the outfall, and an estimate of the total surface area drained by the outfall.

| Outfall<br>No. | Area of Impervious<br>Surface (units) | Total Area Drained<br>(units) | Outfall<br>No. | Area of Impervious Surface<br>(units) | Total Area Drained<br>(units) |
|----------------|---------------------------------------|-------------------------------|----------------|---------------------------------------|-------------------------------|
| 1              | 1.5 acres (approximate)               | 86 acres                      |                |                                       |                               |
|                |                                       |                               |                |                                       |                               |
|                |                                       |                               |                |                                       |                               |
|                |                                       |                               |                |                                       |                               |

B. Provide a narrative description of significant materials that are currently, or in the past three years have been, treated, stored or disposed in a manner that allows exposure to stormwater; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact with stormwater runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The site has transitioned over the past few months. All of the treated wood material and treatment facilities have been removed from the Site.

Wood-treatment related constituents have been detected in Site soil and have previoulsy been measured in stormwater discharge.

Demolition and decontamination of Site structures is planned (city permits pending).

The attached Preliminary Design Report describes planned interim stormwater improvements.

As part of final Site remediation, additional stormwater controls will be designed and implemented per Florida regulations.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in stormwater runoff; and a description of the treatment the stormwater receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

| Outfall No. | Treatment   | Table 2F-1 Code |
|-------------|---|-----------------|
| 1           | Proposed stabilization plan includes converting bare ground to grassed terrain, maintaining silt fencing, and |                 |
|             | impounding stormwater on the east and west side of the existing drainage ditch.                               | 1-V             |
|             | Inspections will be weekly and after storm events. Maintenance will be conducted as needed.                   |                 |
|             | Quarterly sampling will be conducted. A stormwater pollution prevention program is in place.                  |                 |

#### V. Non-stormwater Discharges:

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges, and that all non-stormwater discharges from these outfall(s) are identified in either an accompanying DEP Form 62-620.910(5) or (7) (Forms 2CS or 2ES) application for the outfall.

| Name and Official Title (type or print) | Agnature    | Date Signed |
|---|-------------|-------------|
| Robert Markwell, Vice President         | And Markind | 7-19-00     |
|   |             |             |

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

The site is vacant with the exception of a groundwater treatment facility that discharges to the Gainesville Regional Utilities sewer system under permit. There is no capacity for industrial activity on the site. There is no potential for non-stormwater discharge.

Also, there was no non-stormwater discharge from the facility prior to its recent decommissioning and dismantling.

Also, no non-stormwater discharge locations were observed during a site visit.

#### Facility I.D. Number: FL05B160

#### VI. Significant Leaks or Spills:

Provide existing in formation r egarding the h istory of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released. NONE.

#### VII. Discharge Information:

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in Table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product? Yes (list all such pollutants below) Xo (go to section VIII)

#### VIII. Biological Toxicity Testing Data

| Do you have any knowledge or reason to<br>water in relation to your discharge within | believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving n the last 3 years? |
|--|--|
| Yes (list results below)   | No (go to Section IX)  |
|  |  |
|  |  |
|  |  |

#### IX. Contract Analysis Information

| Were any of the analysis reported in item VII performed by a contract laboratory or consulting firm?<br>Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)<br>No (go to Section X) |   |                |   |  |  |  |  |  |
|--|---|----------------|---|--|--|--|--|--|
| A. Name B. Address C. Area Code & Phone No. D. Pollutants Analyzed   |   |                |   |  |  |  |  |  |
| Advanced Environmental Lab (Koppers)   | 6815 Archer Rd., Gainesville, FL 32608    | (352) 377-2349 | As, Cu, Cr, nutrients, oil/grease, gen. |  |  |  |  |  |
| Test America (Alachua Co EPD)  | 2846 Industrial Plaza Dr, Tallahassee, FL | (850) 878-3994 | As, Cu, Cr, pentachlorophenol, PAHs     |  |  |  |  |  |
|  |   |                |   |  |  |  |  |  |
|  |   |                |   |  |  |  |  |  |

#### Facility I.D. Number: FL05B160

#### X-A. CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

I certify that the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper proper programmenance and operation of the pollution control facilities and, if applicable, pollution sources.

|  | Tetra Tech, Inc.  |
|--|---|
| Signature  | Company Name:   |
| William Musser   | Address: 201 E Pine Street, Suite 1000  |
| Name (please type).  |   |
| (Affix Seal)   | Florida Registration No.: 41118   |
|  | Telephone No.: (407) 839-3955   |
|  | Date: IUI 2 0 2010  |
| I certify under penalty of law that this document and all attachments were prepa<br>assure that qualified personnel properly gather and evaluate the information subr<br>those p ersons d irectly r esponsible for g athering the information, the informatic<br>complete. I am aware that there are significant penalties for submitting false<br>violations. | red under my direction or supervision in accordance with a system designed to<br>nitted. Based on my inquiry of the person or persons who manage the system or<br>on s ubmitted is, to the best of my knowledge and belief, true, a ccurate, and<br>in formation, in cluding the possibility of fine and imprisonment for knowing |
| Robert Markwell, Vice President  | Frank nake  |
| Name & Official Title (type or print)  | Signature   |
| (412) 208-8812   | 7-19-10   |
| Telephone No. (area code & no.)  | Date Signed   |

#### X-B. CERTIFICATIONS FOR PERMIT RENEWALS

I certify that the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.

Signature

Name (please type):

(Affix Seal)

Florida Registration No .:

Telephone No.:

Date:

Address:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, a ccurate, and complete. I am aware that there are significant penalties for submitting false information, in cluding the possibility of fine and imprisonment for knowing violations.

Name & Official Title (type or print)

Telephone No. (area code & no.)

Date Signed

Signature

Company Name:

#### VII. Discharge Information (Continued from page 2F-15 of Form 2F)

**Part A** - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

|  | Minimum Values (include units)               |                            | Average Values (include units)               |                            | # of Storm<br>Events | Sources of Pollutants |
|--|--|----------------------------|--|----------------------------|----------------------|-----------------------|
| Pollutant and CAS<br>Number (if available)       | Grab Sample Taken During<br>First 30 Minutes | Flow-weighted<br>Composite | Grab Sample Taken During<br>First 30 Minutes | Flow-weighted<br>Composite | Sampled              |                       |
| Oil and Grease                                   | ND (< 2.2 mg/L)                              | N/A                        | N/A  | N/A                        | 1                    | none                  |
| Biochemical Oxygen<br>Demand (BOD <sub>5</sub> ) | 5.6 mg/L                                     | 4.1 mg/L                   | N/A  | N/A                        | 2                    | unknown               |
| Chemical Oxygen<br>Demand (COD)                  | 97 mg/L                                      | 82 mg/L                    | 111 mg/L                                     | N/A                        | 3                    | unknown               |
| Total Suspended Solids<br>(TSS)                  | 26 mg/L                                      | 69 mg/L                    | 292 mg/L                                     | N/A                        | 7                    | Site soil             |
| Total Kjeldahl Nitrogen                          | 1.13 mg/L                                    | 0.80 mg/L                  | 1.59 mg/L                                    | N/A                        | 3                    | unknown               |
| Nitrate + Nitrite Nitrogen                       | 0.193 mg/L                                   | 0.040 mg/L                 | 0.239 mg/L                                   | N/A                        | 3                    | unknown               |
| Total Phosphorus                                 | 0.787 mg/L                                   | 0.412 mg/L                 | 0.838 mg/L                                   | N/A                        | 3                    | unknown               |
| рН   | Minimum                                      | Maximum                    | Minimum                                      | Maximum                    | 1                    | N/A [pH = 7.6 in lab] |

**Part B** - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's wastewater permit for its wastewater effluent if the facility is operating under an existing wastewater permit. Complete one table for each outfall. See instructions for additional details and requirements.

|  | Minimum Values (include units)               |                         | Average Values (include units)               |                            | # of Storm        |                       |
|--|--|-------------------------|--|----------------------------|-------------------|-----------------------|
| Pollutant and CAS<br>Number (if available) | Grab Sample Taken During<br>First 30 Minutes | Flow-weighted composite | Grab Sample Taken During<br>First 30 Minutes | Flow-weighted<br>Composite | Events<br>Sampled | Sources of Pollutants |
| N/A  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |
|  |  |                         |  |                            |                   |                       |

#### VII. Discharge Information (Continued from Table VII on page VII - 1 of Form 2F)

| <b>Part C</b> - List each poll instructions for addition | utant shown in Tables 21<br>onal details.        | F-2, 2F-3, and 2F-4 that                                  | at you know or have reaso   | ons to believe is prese   | ent. Complete  | one table for each outfall. See |
|--|--|---|---|---|--|---------------------------------|
|  | Minimum Values (include units)                   |   | Average Values (include units)  |   | # of Storm<br>Events   | Sources of Pollutants           |
| Pollutant and CAS<br>Number (if available)               | Grab Sample Taken During<br>First 30 Minutes     | Flow-weighted<br>Composite                                | Grab Sample Taken During<br>First 30 Minutes  | Flow-weighted<br>Composite                                      | Sampled  |                                 |
| arsenic  | 56 ug/L  | N/A   | 316 ug/L  | N/A   | 6  | Site soil                       |
| copper   | 21 ug/L  | N/A   | 284 ug/L  | N/A   | 6  | Site soil                       |
| chromium (total)   | 20 ug/L  | N/A   | 401 ug/L  | N/A   | 6  | Site soil                       |
| pentachlorophenol  | 0.73 ug/L  | N/A   | N/A   | N/A   | 1  | Site soil                       |
| anthracene   | 1.1 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| benzo(a)anthracene                                       | 1.1 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| benzo(a)pyrene   | 1.2 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| benzo(k)fluoranthene                                     | 0.7 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| chrysene   | 1.7 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| fluoranthene   | 2.7 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| phenanthrene   | 0.7 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
| pyrene   | 3.0 ug/L [I]                                     | N/A   | N/A   | N/A   | 1  | Site soil                       |
|  |  |   |   |   |  |                                 |
| NOTE:  |  |   |   |   |  |                                 |
| [I] = Detected below                                     |  |   |   |   |  |                                 |
| PQL/MRL  |  |   |   |   |  |                                 |
| Estimated Value  |  |   |   |   |  |                                 |
|  |  |   |   |   |  |                                 |
|  |  |   |   |   |  |                                 |
| Part D - Provide data f                                  | for the storm event(s) whi                       | ich resulted in the max                                   | timum values for the flow   | weighted composite  | sample.  |                                 |
| 1.<br>Date of Storm Event                                | 2.<br>Duration of Storm<br>Event<br>(in minutes) | 3.<br>Total rainfall during<br>storm event<br>(in inches) | 4.<br>Number of hours<br>between beginning of<br>storm measured and end<br>of previous measurable<br>rain event | 5.<br>Maximum flow rate<br>during rain event<br>(specify units) | 6.<br>Total flow<br>from rain<br>event<br>(specify<br>units) | 7.<br>Comments                  |
| 5/20/2009  | 210  | 1.57  | 24  | 0.02 cfs  | 1850 gal   |                                 |
| Provide a description o                                  | f the method of flow mea                         | surement or estimate                                      |   |   |  |                                 |

Provide a description of the method of flow measurement or estimate. Timed collection of water volume (performed by Koppers).

## PRELIMINARY DESIGN REPORT FOR INTERIM STORMWATER CONTROLS

# BEAZER EAST INC. (Former Koppers Wood Treating Plant) 200 NW 23<sup>RD</sup> AVENUE-GAINESVILLE FLORIDA SITE

**PREPARED FOR:** 

**BEAZER EAST, INC.** 

**PREPARED BY:** 

TETRA TECH, INC. 201 E. PINE STREET, SUITE 1000 ORLANDO, FLORIDA 32801

July 21, 2010

Tt #200-01299-10002

BEAZER EAST INC - GAINESVILLE SITE PRELIMINARY DESIGN REPORT

| Section<br>No. | Description   |  |  |  |  |  |
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# **SECTION 1**

# SECTION 1 INTRODUCTION

Beazer East, Inc. (Beazer) is preparing to implement stormwater improvements at its property located at 200 NW 23<sup>rd</sup> Avenue, Gainesville, Florida (the "Site"). This federal Superfund Site has been decommissioned as a wood preservative facility and is expected to be redeveloped after completion of substantial Site remediation activities currently being planned. Beazer is working in cooperation with federal, state, and local authorities to select and design a final Site remedy and end use for the property. Thus, future land use modifications are not finalized at this time. The preliminary stormwater analysis is for the transition stage of the facility and not for the final developed conditions, which have not been designed. The "development" activities described herein are thus *interim* Site Best Management Practice (BMP) measures which make the attached permit application different from most permits submitted. We are modifying the developed industrial Site back to a more natural condition with less runoff capabilities until the final Site remedy is implemented.

# 1.1 PURPOSE

The purpose of this Preliminary Design Report (PDR) is to present a plan for *interim* Site actions to mitigate the release of Site-related constituents via stormwater and sediment. This report accompanies an application for a Florida Department of Environmental Protection (FDEP) Permit to Discharge Stormwater Associated with Industrial Activity.

This plan does not represent the *final* design of stormwater controls at the Site. The remedial design process will include robust permanent stormwater controls designed to meet all applicable FDEP regulations. The final design of stormwater controls will depend on the final design of Site surface covers (e.g., percent impervious area), grading, and land use.

# 1.2 GENERAL SITE DESCRIPTION

The approximately 86-acre Site is currently vacant property. The previous Site use was the Koppers Wood Treatment Facility. The Site address is 200 NW 23<sup>rd</sup> Avenue, Gainesville, Florida 32609. The Site is located in Alachua County, Florida. The Site is bound on the south by NW 23<sup>rd</sup> Avenue (State Highway 120), on the west by a residential neighborhood, on the north by several residences and a City of Gainesville storage facility, and on the east by a railroad right of way.

The FDEP Identification Number for the Site is FLR05B160. The prior site owner, Koppers Inc., operated under a Multi Sector Generic Permit (MSGP) for Stormwater Discharge

Associated with Industrial Activity. On March 29, 2010, Beazer submitted a Notice of Intent to use a MSGP when it took ownership of the property on March 30, 2010. FDEP denied the MSGP on May 25, 2010, and indicated that an individual industrial discharge permit would be required. Beazer submitted an application for the individual permit on June 1, 2010, along with a previous version of this report. This revised report accompanies a revised permit application that responds to a Request for Additional Information (RAI) transmitted by FDEP on June 29, 2010.

It should be noted that the St. Johns River Water Management District (SJRWMD) reviewed proposed stormwater development activities as well, and granted a permit for the previous Site operations as 400-001-23427-1. The authorized stormwater activities under the SJRWMD permit were not implemented on the Site, however, and the permit expired.

The existing drainage patterns are shown on the attached Figure 1. The Site drains generally from south to the north. The ultimate receiving water body for stormwater discharge from the Site is Springstead Creek. The Site is currently divided by a stormwater drainage conveyance ditch that separates the Site into an eastern and western half as the drainage ditch runs south to north. Much of the Site remains uncleared and is forested. Those areas of the Site will be left undisturbed at this time, thus the BMPs proposed on the property only directly affect approximately 36 acres of the total Site area of 86 acres. The 36 acres affected are the disturbed portions of the Site where the industrial activities used to take place. Presently, much of this area is bare ground.

# 1.3 PROPOSED INTERIM SITE IMPROVEMENTS

The property has been recently purchased from Koppers, Inc., by Beazer. The ultimate intended use of the property is still under consideration. However, in the interim period, the Koppers facility has been and will be undergoing demolition and decommissioning activities to place the Site in an interim no-use status. The Site is also undergoing environmental remediation operations that will not affect the stormwater discharge from the interim no-use Site condition.

As stated above, all previous wood treatment activities have ceased and all previous industrial use facilities are in the process of being removed. This report describes actions that are planned to significantly reduce runoff and constituent release via stormwater at the Site in the short term. These actions include:

- Root rake-disking hardened bare-ground areas and associated seeding and mulching to facilitate improved vegetative stabilization;
- Construction of sod-covered interceptor swales and containment berms to provide stormwater routing and treatment prior to discharge via the main drainage ditch;

- Installation of silt fencing around the perimeter of unforested Site areas;
- Placement of mulch over Site roads;
- Weekly inspection and maintenance of interim controls; and
- Quarterly sampling and reporting of stormwater quality;

A reduction of the runoff flow and volume is anticipated for the interim condition of the Site due to longer travel time for overland runoff and increased evapotranspiration. Thus the runoff Curve Number (CN) will be less with the use of interim BMPs than it is in the existing condition.

The final Site remedial design will incorporate permanent stormwater controls consistent with the other final remedy components such as soil covers and impermeable caps.

# **SECTION 2**

# SECTION 2 FDEP REGULATORY REQUIREMENTS

# 2.1 NPDES MULTI SECTOR GENERIC PERMIT (MSGP) REQUIREMENTS

The Site was previously regulated under the NPDES MSGP requirements for Sector A, Timber Product Facilities per Section 403.8885 of the Florida Statutes. As part of the MSGP, the Site was required to have a Stormwater Pollution Prevention Plan (SWPPP). In general, the SWPPP describes the pollution prevention procedures and Best Management Practices (BMPs) for the Site and associated operations. The SWPPP identifies the pollution prevention team members, assesses the sources of potential Site-related constituents, and provides BMPs to prevent potential constituent discharges off-Site. In addition to periodic evaluations of the effectiveness of the BMPs, periodic sampling at the Site outfall is also required. The monitoring required under the MSGP included chemical oxygen demand (COD), total suspended solids (TSS), zinc, arsenic, and copper. Presently, there is no active timber product activity as that industrial activity has been completely halted and all processing capabilities removed or decommissioned.

# 2.2 STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

The Site is now under review for an individual (Site-specific) stormwater permit through the FDEP Industrial Wastewater Department. The overall intent of the permitting process remains to prevent the discharge of constituents from the Site. In addition to all of the BMPs required as part of the NPDES MSGP, the Industrial Wastewater division has also requested sampling for dissolved oxygen (DO), turbidity, pH, chromium, hardness, total suspended solids (TSS), and dioxin. Monitoring frequency and parameters are further discussed in the sampling portion of this report, Section 6.

During the interim non-use of the property, there will be no stormwater runoff associated with potential contact of active industrial uses. Since the property used to have industrial activity and the cleanup activities are not complete, interim stormwater management BMP activities are proposed as part of this application.

# **SECTION 3**

# SECTION 3 PROPOSED SITE MODIFICATIONS

# 3.1 PROPOSED MODIFICATIONS

The proposed Site modifications consist of demolition and abandonment of the vacant Koppers Wood Treatment facility and associated interim Site stabilization measures to control erosion and sediment. Activities related to decommissioning and demolition of Site structures are described in other documents. This section presents the proposed Site modifications related to stormwater sediment and dust control. These modifications, summarized in Figure 3, are listed below:

- Sit fencing will be installed around the perimeter of Site modifications to inhibit erosion and sediment migration (Sheet D-1).
- Bare-ground areas will be root rake-disked, seeded, and mulched. Root raking-disking will be limited to only hardened soil in the bare-ground areas that needs some preparation; only the top few inches of soil will be disturbed so that the bulk permeability of soils in the areas is not substantially increased. For areas with good existing grass cover, no preparation will be required. During this operation, a water truck and sprayer will be used to keep the ground moist to prevent generation of dust. Seeding will occur as quickly as practicable after root raking-disking.
- Interior roadways will be covered with mulch to limit sediment and dust discharge.
- Sodded interceptor swales will be constructed adjacent to the Florida Department of Transportation (FDOT) drainage ditch that bisects the Site in order to provide routing and treatment of runoff prior to stormwater entry into the drainage ditch (Sheet D-2). In constructing the swales, soil will be moved only a short distance to create the depressions and a small berm adjacent to the swale (between the swale and ditch). Again, the water truck will be used to keep soil moist to prevent dust generation. Sod will be placed immediately.
- Sodded containment berms will be constructed to impound 1.5 acre-ft (see Section 4) of runoff and limit off-Site discharge of sediment in stormwater runoff is (Sheet D-3). This berm will be constructed with clean off-Site soil. A water truck will be used to limit dust generation. Sod will be placed immediately.
- As necessary, the northeast corner of the Site will be regraded prior to root raking-disking and seeding to ensure that Site runoff does not leave the Site except via the main drainage ditch at Outfall 1. A sodded berm will be added if necessary.

The overall result of the proposed interim BMP Site modifications will result in stabilization of the Site soil, significant reduction of compacted limerock/dirt areas, and on-Site impoundment of surface runoff during storms. The interim Site modifications will reduce the volume of

stormwater runoff that exits the Site during any storm event (see Section 4, Appendix A). The modifications will also substantially decrease the amount of off-Site sediment transport, reducing the potential for discharge of Site-related constituents.

# 3.2 TENTATIVE SCHEDULE

The proposed interim improvements can be installed within one month of approval. Operation and maintenance of the temporary erosion and sediment control measures (see Section 5) will continue until the permanent erosion control measures are designed and implemented. It is currently expected that permanent stormwater controls, including appropriately sized retention/detention structures, will be installed in 2013-2014.

# **SECTION 4**

# SECTION 4 PRELIMINARY STORMWATER CALCULATION RESULTS

# 4.1 WATER QUANTITY – SITE DISCHARGE

As the proposed interim Site operations consist of demolition of existing wood treatment facilities and installation of stabilization and erosion control measures, the post-development (i.e. interim-state) stormwater runoff will be less than the pre-development (current) stormwater runoff for any storm event (from the smaller storm events such as the mean annual event up to and including the more extreme events such as the 100 year/24 hour event). In addition, as there will be less stormwater discharge off-Site, the potential release of constituents from the Site via stormwater will be significantly reduced. Furthermore, the proposed swale and berm creation will further reduce stormwater discharge as the swales and associated containment berms are placed in locations to impound the first flush of runoff from the stabilized, cleared areas and to treat Site runoff (through sediment removal) prior to entry into the FDOT drainage ditch. The proposed improvements will provide a level of stormwater treatment that is not currently provided for this Site. Therefore, the volumetric discharge as well as the flow rate of stormwater discharging from the Site upon completion of the demolition and interim stabilization measures for any storm event will be less than that of the existing Site condition. See Appendix A for calculations of the 10-yr and 100-yr storm flow for the current (pre-development) and proposed interim (post-development) conditions. Note that these storms are used as examples only; runoff flow and volume will be decreased for any storm after the proposed improvements are implemented.

## 4.2 WATER QUALITY – RUNOFF TREATMENT

As the proposed Site modifications will remove hardened bare-ground areas and replace them with seeded areas, additional stormwater management areas are not necessary to reduce stormwater volume release.

To further demonstrate proactive interim Site BMP modifications, on-Site stormwater impoundment will be provided behind containment berms sufficient to accommodate one half inch of runoff from the 36 acres of improved area (1.5 acre-feet, Appendix A). This impoundment will periodically detain quantities of stormwater that in the pre-developed (current) condition would have been discharged directly off-Site via the drainage ditch without treatment. The detention will result in settling of sediment. The approximate locations of the surface water impoundment areas are shown in Figure 3.

It is important to note that the BMP measures do not require any excavation and the berms will be no higher than three (3) feet tall. Berms will be constructed with clean soil from off Site. The stabilized berms will range in height from one foot (once the impoundment volume contour has been achieved) to the maximum height at the northern (lowest point) area of the Site. A specific design-level survey will be conducted prior to final alignment and construction of the berms to ensure that the design volume is attained and runoff will not flow off-Site except via the main drainage ditch. The berms will extend beyond the impoundment volume (approximately 500 ft; to be finalized after survey) to ensure that surface runoff is captured. The berms will be stabilized with sod and contain slopes no steeper than 3:1 (H:V). Our preliminary calculations indicate that the on-Site impoundment areas will meet a minimum of one half inch of runoff treatment over the decommissioned disturbed areas.

It is also important to note that the impoundment areas will be constructed entirely within the capture zone of the existing Surficial Aquifer extraction system. The berms will be constructed so as not to interfere with access to existing extraction or monitoring wells.

# **SECTION 5**

# SECTION 5 INSPECTION AND MAINTENANCE

## 5.1 GENERAL

The Site existing conditions, general history, pollution prevention objectives, pollution prevention team, inventory of previously exposed materials, Site spill history, and many other detailed information items are contained in the Site Stormwater Pollution Prevention Plan (SWPPP) that was previously submitted to FDEP as part of the MSGP application and is available upon request. Additional details of inspection and maintenance activities related to stormwater control measures are discussed below.

# 5.2 INSPECTIONS

Stormwater management devices such as swales, silt fencing, perimeter berms, outlet structures, and other applicable devices will be inspected weekly and after storms of one-half inch or greater. The devices will be inspected for signs of erosion, excess collected silt from runoff, and collection of debris, which could interfere with discharge monitoring or flow. Up-gradient ditches and drainage systems will be inspected at least four times a year during runoff events. These inspections will be performed by the Site Operation and Maintenance contractor. A Stormwater Management Inspection Form will be used to document each inspection as part of the SWPPP. Maintenance or repair needs will be identified on the form. The form will also be used to document when and how identified needs are corrected. The forms and records will be maintained on Site as part of the SWPPP.

The inspection process will provide for periodic identification of any required management system designs such as berm repair or design modification requirements, for example if the berm height needed to be increased, etc. Any required Site modifications will be documented as part of the SWPPP.

# 5.3 PREVENTIVE MAINTENANCE AND CORRECTIVE ACTION

Maintenance needs identified by inspections will be accomplished on a schedule appropriate for each situation. Sources of turbidity or silt identified during inspections will also be evaluated for potential corrective actions. Corrective actions which should be considered include: re-routing of traffic, additional mulch or gravel surfacing roads, ditch modifications, culvert additions or changes, changing stabilization management, grading, and removal of silt buildup (with proper handling and disposal). Vegetative cover will be maintained through irrigation, fertilization, and reseeding as needed.

Additionally, water levels and concentrations will be monitored at Surficial-Aquifer extraction wells after installation of the stormwater controls to verify that increases in infiltration are small and have negligible impact on capture of Site-related constituents. If necessary, the pumping rates of the northern wells of the Surficial Aquifer extraction system will be increased to address changes in groundwater conditions.

# **SECTION 6**

# SECTION 6 SAMPLING

# 6.1 GENERAL

This report section identifies which constituents will be sampled for, the regulatory standards for those constituents, the frequency requirements for the sampling events, the rainfall event qualifications, and the sample locations.

# 6.2 CONSTITUENTS

Based on the requirements of FDEP, past use and past sampling at the Site, and the water-quality standards defined in 62-302 FAC, the table below lists the parameters that will be measured in stormwater at the Site. Also listed are the analysis methods, the method reporting limits (MRLs), and method detection limits (MDLs) for each parameter.

| Parameter                                   | Method    | MRL          | MDL        |
|---|-----------|--------------|------------|
| Arsenic                                     | EPA 6010  | 3 ug/L       | 10 ug/L    |
| Copper                                      | EPA 6010  | 2 ug/L       | 10 ug/L    |
| Chromium (total)                            | EPA 6010  | 1 ug/L       | 10 ug/L    |
| Dioxins (polychlorinated dibenzo-p-dioxins) | EPA 1613  | 10-100 pg/L* | 5-50 pg/L* |
| Total suspended solids (TSS)                | EPA 160.2 | NA           | NA         |
| Hardness (as CaCO <sub>3</sub> )            | SM 2430B  | NA           | NA         |
| Turbidity                                   | Field     | NA           | NA         |
| Dissolved Oxygen (DO)                       | Field     | NA           | NA         |
| рН  | Field     | NA           | NA         |

\* Varies by congener; MDL varies by sample and will not exceed MRL/2.

Water flow will also be estimated in the field during sample collection.

# 6.3 SAMPLING FREQUENCY

Sampling will be conducted on a quarterly basis during the first qualifying storm event of the quarter occurring on a normal work day. A qualifying storm event is one that:

- (a) Is greater than 0.1 inches in magnitude;
- (b) Produces measurable runoff in the ditch at Outfall 1; and
- (c) Occurs at least 72 hours after the previous qualifying storm.

Sampling shall be performed within 30 minutes of flow at the outfall. All samples shall be grab samples.

# 6.4 LOCATIONS

There is a single outfall for this facility. All areas drain into the same ditch and exit the Site at Outfall 1, see attached USGS Topographic Map, Figure 1. Outfall 1 is the location previously utilized in the MSGP program for sampling. Outfall 1 and three additional sample locations will be sampled for each sampling event. The first additional sample location is the Site inflow location in the main stormwater ditch (Sample Point 2 on the attached USGS Topographic Map, Figure 1). The additional sample locations are on Springstead Creek upstream and downstream of the Site-ditch confluence (two locations near Sample Point 3, attached Figure 1). With the exception of dioxin, all constituents will be analyzed at each location. Dioxin will only be analyzed for samples at Outfall 1.

The overall outfall of Springstead Creek is designated as Class III Surface water and is designated under 62-302 FAC requirements. Sample results will be compared to 62-302 FAC standards in the sample-analysis reports submitted to FDEP.







2

- ROOT RAKE-DISK CLEARED SITE TO BREAK UP HARDENED LIMEROCK (36 AC) 1.
- 2. INTERCEPTOR SWALES GRADED BOTH SIDES ALONG DITCH
- 3. SWALES SOD (3,800 LF, 2' DEEP; SODDING ONLY 1' BOTTOM 8' WIDE)
- SEED & MULCH (HYDROSEEDING GEOSKIN) 4.
- SILT FENCE (DITCH & PERIMETER) AS SHOWN
   SWALE OVERFLOW W/RIPRAP (FABRIC-FORMED)
- 7. USE EXISTING MULCH AVAILABLE ON-SITE TO COVER ACCESS ROADS ON SITE



3

- MULCHED ROAD
  - PROPERTY LINE

#### BERM

# **TETRA TECH**

Tł

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| William D. Musser, P.E.          | MARK | DATE | DESCRIPTION |
|----------------------------------|------|------|-------------|
| P.E. No. 41118, FL               |      |      |             |
| 201 East Pine Street, Suite 1000 |      |      |             |
| Engineering Business No. 2429    |      |      |             |
|                                  |      |      |             |
| DATE                             |      |      |             |
| DATE                             |      |      |             |

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| BY | Beazer East, Inc.<br>City of Gainesville, Florida           | Project No.: 200-01299- | 10002 |  |  |
|----|---|-------------------------|-------|--|--|
|    |   | Designed By:            | RDB   |  |  |
|    | Beazer Site   | Drawn By:               | FBA   |  |  |
|    | Improvements  | Checked By:             | WRJ   |  |  |
|    | CONCEPTUAL INTERIM EROSION<br>CONTROL AND DRAINAGE MEASURES | FIG-3                   |       |  |  |
|    |   |                         |       |  |  |
|    |   |                         |       |  |  |





Copyright: Tetra Tech

![](_page_64_Figure_0.jpeg)

![](_page_64_Figure_1.jpeg)

# APPENDIX A

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### **BEAZER SITE IMPROVEMENTS**

### TIME OF CONCENTRATION CALCULATIONS (TR-55 METHOD)

Г

# BASIN ID =>

## **SHEET FLOW**

| Segment                                   |   |
|---|---|
| Surface description Paved =               | 1, Unpaved = 0                                |
| Manning's roughness coeffici              | ent (n) (bare gnd/short grass)                |
| Flow Length L (ft)                        |   |
| Elevation Change (ft)                     |   |
| 2 Year 24 hour Rainfall (P <sub>2</sub> ) | inches  |
| Slope of hydraulic grade line             | (s) ft/ft                                     |
| Travel time (T <sub>t</sub> ) hours       | $T_t = 0.007 (nL)^{0.8} / (P_2^{0.5}S^{0.4})$ |
| Travel time $(T_t)$ minutes               |   |

#### Beazer Site PRE POST 1 1 0 0 0.011 0.15 300 300 0.50 0.50 4.60 4.60 0.002 0.002 0.11 0.89 53.2 6.6

2

0 910

1.5

0.002

0.66

0.39

23.2

# SHALLOW CONCENTRATED FLOW

| Segment   | 2    |  |
|---|------|--|
| Surface description Paved = 1, Unpaved = 0            | 0    |  |
| Flow Length - L (ft)                                  |      |  |
| Elevation Change (ft)                                 |      |  |
| Slope of hydraulic grade line (s) ft/ft               |      |  |
| Average Velocity (V) ft/s (equations from appendix F) |      |  |
| Travel time ( $T_t$ ) hours $T_t = L / (3600*V)$      | 0.47 |  |
| Travel time (T <sub>t</sub> ) minutes                 |      |  |

## **CHANNEL FLOW**

| Segment  |   |  |  |  |  |
|--|---|--|--|--|--|
| Description P-Pipe, C-Channe                                       | el  |  |  |  |  |
| Flow Length (L) ft   |   |  |  |  |  |
| Elevation Change (ft)  |   |  |  |  |  |
| Manning's roughness coefficient (n)                                |   |  |  |  |  |
| Pipe Diameter (ft)   |   |  |  |  |  |
| Trapezoidal Channel Side Slopes                                    |   |  |  |  |  |
| Bottom Width (ft)  |   |  |  |  |  |
| Approximate Depth (ft)   |   |  |  |  |  |
| Wetted Perimeter (P <sub>w</sub> ) ft                              |   |  |  |  |  |
| Cross-sectional flow area (a) $ft^2$                               |   |  |  |  |  |
| Slope of hydraulic grade line (s) ft/ft                            |   |  |  |  |  |
| Average Velocity (V) ft/s V  | $V = [1.49 \text{ R}^{2/3} \text{s}^{1/2}] / \text{ n}$ |  |  |  |  |
| Hydraulic radius ( $\mathbf{R} = \mathbf{a} / \mathbf{P}_{w}$ ) ft |   |  |  |  |  |
| Travel time $(T_t)$ hours $T_t = L / (3600*V)$                     |   |  |  |  |  |
| Travel time (T <sub>t</sub> ) minutes                              |   |  |  |  |  |

| Time of Concentration (T <sub>c</sub> ) hours =   | 0.74 | 1.50 |
|---|------|------|
| Time of Concentration (T <sub>c</sub> ) minutes = | 44.3 | 90.1 |

| 3     | 3     |
|-------|-------|
| С     | С     |
| 2100  | 2100  |
| 4     | 4     |
| 0.026 | 0.026 |
|       |       |
| 2:1   | 3:1   |
| 6     | 1     |
| 3     | 2     |
| 19.42 | 13.66 |
| 36.00 | 14.00 |
| 0.002 | 0.002 |
| 3.78  | 2.54  |
| 1.85  | 1.02  |
| 0.15  | 0.23  |
| 9.3   | 13.8  |
|       |       |
|       |       |

![](_page_67_Figure_0.jpeg)