TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

November 10, 2000

Mr. Clyde Ding, P.E.
Hanson Aggregates West, Inc.
P O Box 190999
Dallas, TX 75219-0999

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: Hanson Aggregates West - Servtex Facility; Located at 21303 FM 2252; Garden Ridge, Texas
TYPE OF PLAN: Request for Exception; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 1587.00

Dear Mr. Ding:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the request for exception for the referenced project that Lesley Pedde, P.E. of Cook-Joyce, Inc. submitted to the San Antonio Regional Office on behalf of Hanson Aggregates West, Inc. on October 16, 2000. The request for exception proposed in the submittal is in general compliance with 30 TAC § 213.9; therefore, approval of the plan is hereby granted subject to applicable state rules and the conditions in this approval letter. *This approval expires two (2) years from the date of this approval unless, prior to the expiration date, construction has commenced on the project or an extension of time has been requested.*

Under 30 TAC §213.9(a),

> Exceptions to any substantive provision of this chapter related to the protection of water quality may be granted by the executive director **if the requestor can demonstrate equivalent water quality protection for the Edwards Aquifer.** Requests for exceptions will be reviewed by the executive director on a case-by-case basis. Prior approval under this section must be obtained for the exception to be authorized.

PROJECT DESCRIPTION

As presented, this 2,000 acre quarry site has been in operation since the late 1930's. The proposed project is to enhance the efficiency of water recycling at the quarry. Incoming process wastewater, mine sweep groundwater, and stormwater from the active quarry will be mixed with an anionic or nonionic flocculating product and a small amount of cationic product to increase floc production. Flocculation will occur in a clay-lined treatment pond. A floating dredge will transfer the floc slurry to a particle bonding machine (PBM) where a cationic reagent and anionic reagent will be added to further consolidate the floc. Following the addition of the reagents, the floc mass will pass through a series of rollers in the PBM to facilitate liquid removal. Expelled liquid will be returned to the settling pond. The dried solids will be placed in an adjacent mined out area. The untreated fines previously disposed of in that area will function as a liner.

Some minor construction will occur for this project, and an exception to the requirement of submitting a water pollution abatement plan (WPAP) was requested. All construction will occur within the existing quarry. A prefabricated steel building and associated concrete pad will be constructed to house the particle bonding machines and associated chemicals. The chemicals will be stored within containment inside the building.

During construction, upgradient diversion berms and downgradient silt fences and/or berms will be installed at the building construction area prior to the initiation of construction activities, and be maintained during construction. After construction, entrances to the particle bonding building will be curbed such that the building will function as a containment area. Chemical solutions will be mixed and stored within a curbed area. In the event of a spill, this mixing area will be provided with a drain to direct the treatment chemicals to a drain system and then to the treatment/dredge pond.

EXCEPTION JUSTIFICATION

During construction, upgradient diversion berms and downgradient silt fences and/or berms will be installed at the building construction area prior to the initiation of construction activities, and be maintained during construction. After construction, entrances to the particle bonding building will be curbed such that the building will function as a containment area. Chemical solutions will be mixed and stored within a curbed area. In the event of a spill, this mixing area will be provided with a drain to direct the treatment chemicals to a drain system and then to the treatment/dredge pond.

SPECIAL CONDITIONS FOR EXCEPTION

I. The proposed flocculent must be used in accordance with the manufacturer's instructions.

II. Any spillage of the flocculent must be reported to the TNRCC.

III. The request for exception is granted.

STANDARD CONDITIONS FOR EXCEPTION

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries, covered by the Edwards Aquifer protection plan, shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.

3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.

4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and file number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension of an approved plan.

During Construction:

6. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

7. If any sensitive feature is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

8. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

9. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

<u>After Completion of Construction:</u>

11. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

12. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

13. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact John Mauser of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource Conservation Commission

JAS/JKM/eg

Enclosure: Deed Recordation Affidavit, Form TNRCC-0625
Change in Responsibility for Maintenance or Permanent BMPs-Form TNRCC-10263

cc: Ms. Lesley S. Pedde, Cook-Joyce, Inc.
Mr. Jay Feibelman, City of Garden Ridge
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations, Austin

RECEIVED
APR 12 2002
COUNTY ENGINEER

GENERAL INFORMATION FORM

FOR REGULATED ACTIVITIES ON THE
EDWARDS AQUIFER RECHARGE AND TRANSITION ZONES
AND RELATING TO 30 TAC §213.4(b) & §213.5(b)(2)(A), (B)
EFFECTIVE JUNE 1, 1999

PROJECT NAME: Hanson Aggregates South Central Region. - Servtex Facility
COUNTY: Comal STREAM BASIN: Guadalupe River

EDWARDS AQUIFER: X RECHARGE ZONE
___ TRANSITION ZONE

PLAN TYPE: X WPAP __ AST __ EXCEPTION
__ SCS __ UST __ MODIFICATION

APPLICANT INFORMATION

1. Applicant:

Contact Person:	Clyde Ding, P.E.
Entity:	Hanson Aggregates South Central Region
Mailing Address:	8505 Freeport Pkwy, Ste. 600
City, State:	Irving, Texas Zip: 75063
Telephone:	972/621-0345 FAX: 469/417-1400

2. Agent/Representative (If any):

Contact Person:	Steve Cook, P.E.
Entity:	Cook-Joyce, Inc.
Mailing Address:	812 W. Eleventh Street
City, State:	Austin, Texas Zip: 78711
Telephone:	512/474-9097 FAX: 12/474-8463

PROJECT LOCATION

3. Site Address: Hanson Aggregates West, Inc. - Servtex Facility
Street: 21303 FM 2252
City: Garden Ridge Zip: 78132

4. X This project is inside the city limits of Garden Ridge.
__ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
__ This project is not located within any city=s limits or ETJ.

5. The location of the project site is described below. The description provides sufficient detail and clarity so that the TNRCC's Regional staff can easily locate the project and site boundaries for a field investigation.

The Hanson Servtex Facility is located at the intersection of Farm to Market Roads 2252 and 1337. The site is identified with a sign. The project area is located on the south side of the facility and is identified as the Worley Tract.

6. _X_ **ATTACHMENT A - ROAD MAP.** A road map showing directions to and the location of the project site is attached at the end of this form.

7. _X_ **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP.** A copy of the official 7 2 minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached behind this sheet. The map(s) should clearly show:

   _X_ Project site.
   _X_ USGS Quadrangle Name(s).
   _X_ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
   ___ Drainage path from the project to the boundary of the Recharge Zone.

8. _X_ Sufficient survey staking is provided on the project to allow TNRCC regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. **The TNRCC must be able to inspect the project site or the application will be returned.**

9. _X_ **ATTACHMENT C - PROJECT DESCRIPTION.** Attached at the end of this form is a detailed narrative description of the proposed project.

10. Existing project site conditions are noted below:
   ___ Existing commercial site
   _X_ Existing industrial site
   ___ Existing residential site
   ___ Existing paved and/or unpaved roads
   _X_ Undeveloped (Cleared)
   _X_ Undeveloped (Undisturbed/Uncleared)
   ___ Other:

PROHIBITED ACTIVITIES

11. _X_ I am aware that the following activities are prohibited on the **Recharge Zone** and are not proposed for this project:

   (1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
   (2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC '213.3;
   (3) land disposal of Class I wastes, as defined in 30 TAC '335.1;
   (4) the use of sewage holding tanks as parts of organized collection systems; and
   (5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in '330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

12. _X_ I am aware that the following activities are prohibited on the **Transition Zone** and are not proposed for this project:

   (1) waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
   (2) land disposal of Class I wastes, as defined in 30 TAC '335.1; and

(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in '330.41 (b), (c), and (d) of this title.

ADMINISTRATIVE INFORMATION

13. The fee for the plan(s) is based on:

_X_ For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
___ For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.
___ For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.
___ A Contributing Zone Plan.
___ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
___ A request for an extension to a previously approved plan.

14. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TNRCC is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

___ TNRCC cashier
___ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
_X_ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

15. _X_ Submit one (1) original and three (3) copies of the completed application to the appropriate regional office for distribution by the TNRCC to the local municipality or county, groundwater conservation districts, and the TNRCC's Central Office.

16. _X_ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the executive director.

_X_ No person shall commence any regulated activity until the Contributing Zone Plan for the activity has been filed with the executive director.

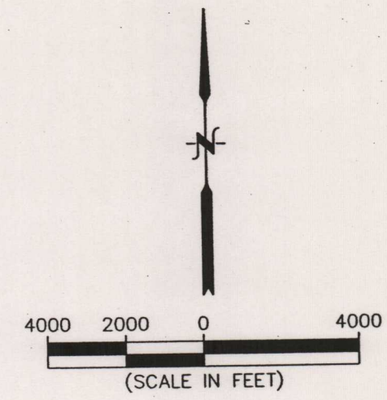
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **GENERAL INFORMATION FORM** is hereby submitted for TNRCC review. The application was prepared by:

Steve Cook, P.E.
Printed Name of Applicant/Owner/Agent

Signature of Applicant/Owner/Agent

STATE OF TEXAS
STEPHEN L. COOK
42203
REGISTERED PROFESSIONAL ENGINEER

3/27/02
Date



LEGEND

SITE BOUNDARY

APPROXIMATE CITY LIMITS

BASE MAP SOURCE:
TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNRIS)
TEXAS DEPARTMENT OF TRANSPORTATION (TxDot)
DIGITAL DATA FILES
BEXAR COUNTY; 1999
COMAL COUNTY: 1999
GUADALUPE COUNTY: 1999

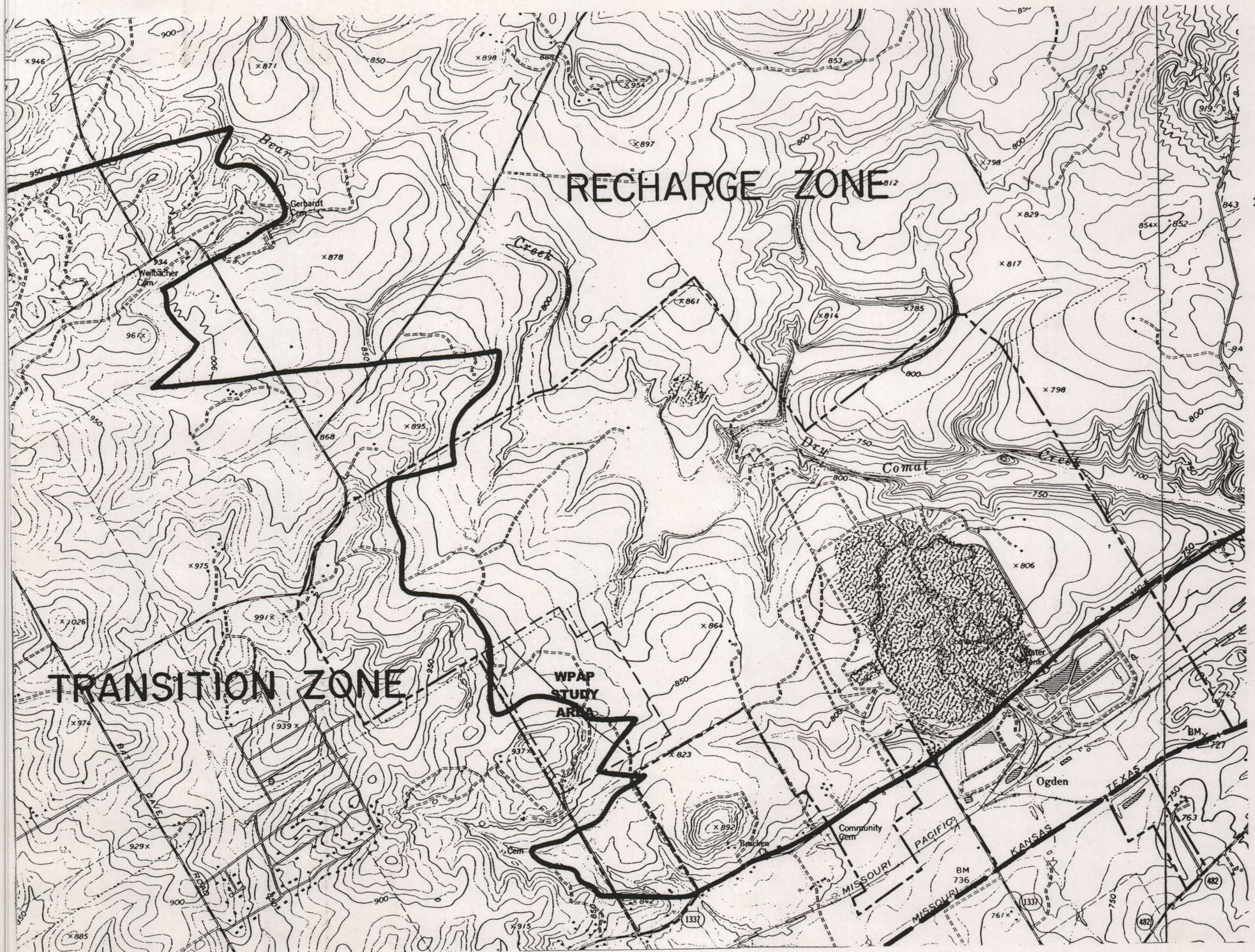
REV.	DATE	DESCRIPTION	DR BY	APP BY

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
HANSON AGGREGATES WEST, INC.
NEW BRAUNFELS, TEXAS

SHEET TITLE:
ROAD MAP

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 01065.01
CHK BY	DHG		CJI NO. 01065009
APP BY	SLC	5	SHEET 1 OF 1 SHEETS
DATE ISSUED: 03-22-2002			ATTACHMENT NO. A
PURPOSE: TNRCC REVIEW			



N

2000 1000 0 2000

(SCALE IN FEET)

LEGEND

FACILITY BOUNDARY

BASE MAP SOURCE:
U.S.G.S. 7.5 MIN TOPOGRAPHIC
BAT CAVE QUADRANGLE; 1967
PHOTOREVISED 1973
U.S.G.S. 7.5 MIN TOPOGRAPHIC
NEW BRAUNFELS WEST QUADRANGLE; 1958
PHOTOREVISED 1973

REV.	DATE	DESCRIPTION	DR BY	APP BY

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
HANSON AGGREGATES WEST, INC.
NEW BRAUNFELS, TEXAS

SHEET TITLE:
RECHARGE ZONE BOUNDARY

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 01065
CHK BY	DHG		CJI NO. 01065008
APP BY	SLC		SHEET 1 OF 1 SHEETS
DATE ISSUED: 03-22-2002			ATTACHMENT NO. B
PURPOSE: TNRCC REVIEW			

ATTACHMENT C – FORM 0587
PROJECT DESCRIPTION

The Hanson Aggregates South Central Region Servtex Facility (Hanson Servtex), located in Garden Ridge, Texas, is an existing limestone quarrying and crushing operation. The facility has been in operation since the late 1930s. Total site acreage is approximately 2,000 acres, with over half of the total acreage developed as limestone quarry. The facility is located at the intersection of Farm to Market Roads 2252 and 1337. The site is identified with a sign.

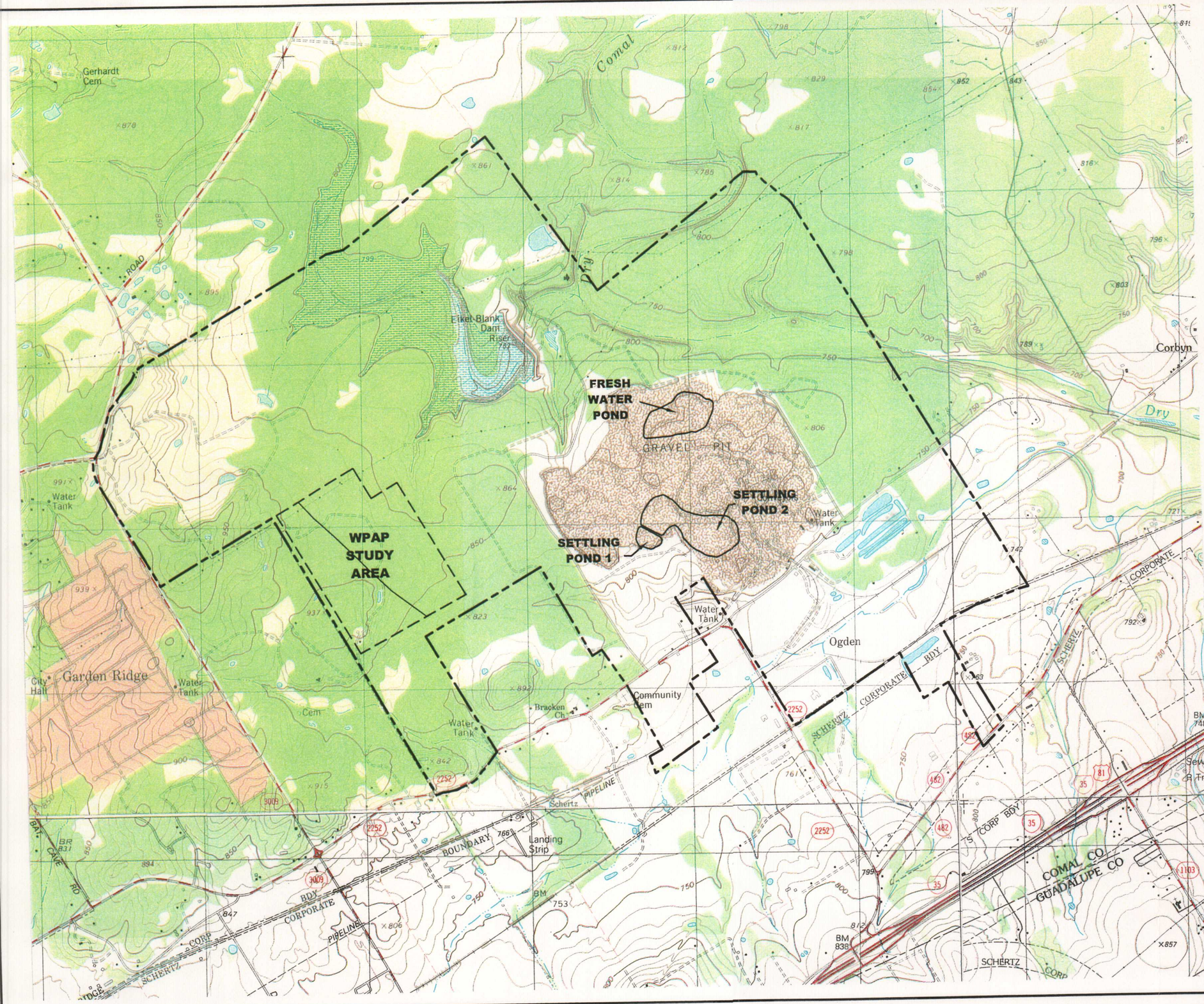
In May 2001, the Hanson Aggregates South Central Region (Hanson) purchased a tract of land known as the Worley Property. The project area is located on the south side of the facility and is identified as the Worley Tract. The approximate size is 110 acres. It is Hanson's intention to quarry limestone on a portion of that property. Attachment B, USGS/Edwards Recharge Zone Map, shows the proposed mine limit. A total of approximately 110 acres will be disturbed and/or mined. This will be an expansion of the existing limestone quarry from the adjacent property. Hanson anticipates utilization of this area within the next two years.

The mining operation will progress continuously onto the Worley property from the existing mine face area. The mining operation takes place in predefined fractions of the surface of the site. The area defined for each fraction will be cleared and topsoil will be removed and used to construct the diversion berm at the edge of the disturbed area. The disturbed area storm water runoff for each fraction will be prevented from leaving the area by diverting it into the mine pit for collection and use in the pit. The stormwater from the undisturbed area outside of the diversion berm is prevented from entering the disturbed area, thereby minimizing the amount of stormwater from the disturbed area. The drilling rig used to drill the holes for the blasting, used to fracture the limestone and cause it to collapse into the mine pit, is operated on the surface above the mine face and in the disturbed area inside of the diversion berm. All loading and transportation of the rock is within the mine pit. The diversion berm will be extended and moved as the mining operation disturbed area is moved into the next fraction to be mined. All pre-mining and mining activities occur within the diversion berms. Surface access to the

project location will be provided from the existing mining area road, which minimizes the disturbed area for the project. The roads within the facility consist of hard limestone and rock. The use of sewage holding tanks is accomplished within the existing quarry area. The project site will be utilized only for surface preparation for the mining operations and the mining activities.

For the current operation in the existing quarry, impounded storm water and intercepted groundwater from the mining operation and process wastewater from the crushing operation are diverted to three sedimentation ponds operated in series (See Site Map). The first two ponds were designed and operated to allow settling of solids. The third pond, the Fresh Water Pond, is intended to be a holding pond for the treated water. Treated water is pumped from the third pond for replacement of plant process water. Hanson holds TNRCC Permit No 00380, which authorizes discharge from the Fresh Water Pond. Hanson has not discharged in several years.

For this project, to the extent possible, upgradient storm water will be diverted around the proposed mine area and on-site storm water will be captured within the quarry.



N

2000 1000 0 2000

(SCALE IN FEET)

LEGEND

FACILITY BOUNDARY

BASE MAP SOURCE:
U.S.G.S. 7.5 MIN TOPOGRAPHIC
BAT CAVE QUADRANGLE; 1967
PHOTOREVISED 1973
U.S.G.S. 7.5 MIN TOPOGRAPHIC
NEW BRAUNFELS WEST QUADRANGLE; 1958
PHOTOREVISED 1973

REV.	DATE	DESCRIPTION	DR BY	APP BY

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
HANSON AGGREGATES WEST, INC.
NEW BRAUNFELS, TEXAS

SHEET TITLE:
SITE MAP

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 01065
CHK BY	DHG		CJI NO. 01065007
APP BY	SLC		SHEET 1 OF 1 SHEETS
DATE ISSUED: 03-22-2002			FIGURE NO. 1
PURPOSE: TNRCC REVIEW			

GEOLOGIC ASSESSMENT
FOR REGULATED ACTIVITIES
ON THE EDWARDS AQUIFER RECHARGE/TRANSITION ZONES
AND RELATING TO 30 TAC §213.5(b)(3), EFFECTIVE JUNE 1, 1999

PROJECT NAME: Hanson - ServTX Facility

TYPE OF PROJECT: ✔ WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: ✔ Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. ✔ Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

2. Soil cover on the project site is 0' - 2' feet thick. In general, the soil present appears to have the ability to:

__ transmit fluid flow to the subsurface.
✔ impede fluid flow to the subsurface.

3. ✔ **SOILS ATTACHMENT**. A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics are attached at the end of this form.

4. ✔ A **STRATIGRAPHIC COLUMN** is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column.

5. ✔ A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY** is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.

6. ✔ Appropriate **SITE GEOLOGIC MAP(S)** are attached:

The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1" : 400'

Applicant's Site Plan Scale	1" = 2000'
Site Geologic Map Scale	1" = 2000'

7. Method of collecting positional data:
✔ Global Positioning System (GPS) technology.
__ Other method(s).

8. ✔ The project site is shown and labeled on the Site Geologic Map.
9. ✔ Surface geologic units are shown and labeled on the Site Geologic Map.

10. ✔ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in

the attached Geologic Assessment Table.

___ Geologic or manmade features were not discovered on the project site during the field investigation.

11. ✔ The Recharge Zone boundary is shown and labeled, if appropriate.

12. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):

___ There are ___(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)

___ The wells are not in use and have been properly abandoned.

___ The wells are not in use and will be properly abandoned.

___ The wells are in use and comply with 16 TAC §76.

✔ There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

13. ✔ One (1) original and three (3) copies of the completed assessment has been provided.

Date(s) Geologic Assessment was performed: 5/17/01, 6/21/01 - 6/29/01

Date(s)

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC 213.

Doug Granger
Print Name of Geologist

512-474-9097
Telephone

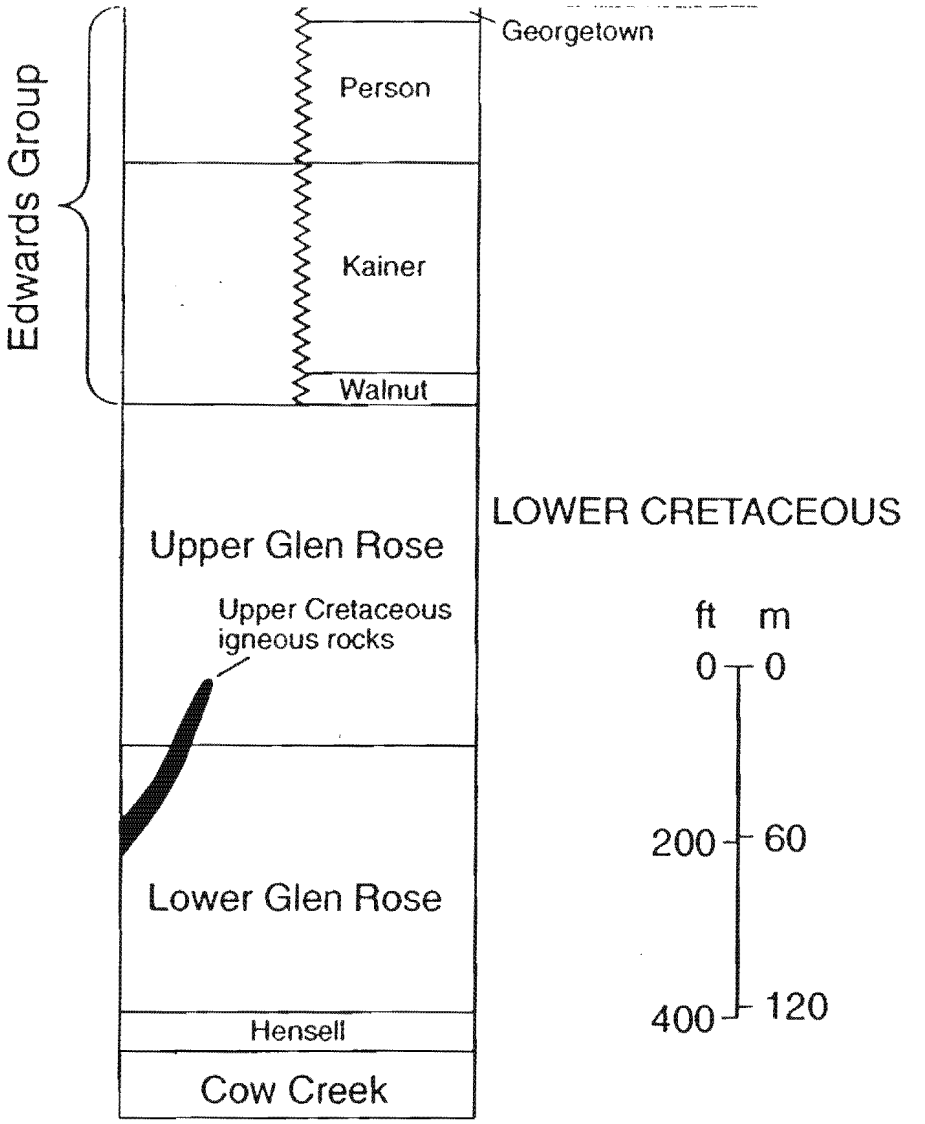
512-474-8463
Fax

Doug Granger 3/28/02
Signature of Geologist Date

Representing: Cook-Joyce, Inc.
(Name of Company)

3.0 SOILS ATTACHMENT

Soil observed on-site is the Rumple-Comfort (RUD) according to the United States Department of Agriculture's *Soil Survey of Comal and Hays Counties, Texas* issued June 1984. The soil on-site is generally less than one foot thick and covers approximately 80 percent of the site while limestone outcrops account for the other 20 percent. The RUD is typically dark or reddish-brown, mildly alkaline, noncalcareous throughout, and have surface textures ranging from cherty loam through cherty or stony clay. The RUD is well drained and surface water runoff is medium, making erosion only a moderate hazard. Permeability is moderately slow to slow in the RUD soils. These soils are typically used as rangeland or wildlife habitat since they are not generally suited to cultivated crops due to the stones present in the soil, the limited rooting zone, and the very low available water capacity of the RUD. The stony surface layer, shallowness to bedrock, and the corrosivity to uncoated steel severely limit urban and recreational use of the RUD.



BASE MAP SOURCE:
BUREAU OF ECONOMIC GEOLOGY
MISCELLANEOUS MAP NO. 39
GEOLOGIC MAP OF NEW BRAUNFELS, TEXAS

REV.	DATE	DESCRIPTION	DR BY	APP BY

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
HANSON AGGREAGATES WEST, INC.
NEW BRAUNFELS, TEXAS

SHEET TITLE:
STRATIGRAPIC COLUMN

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 01065
CHK BY	DHG		CJI NO. 01065002
APP BY	DHG		SHEET 1 OF 1 SHEETS
DATE ISSUED: 12-03-2001			FIGURE NO. 1
PURPOSE: CLIENT REVIEW			

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Hanson - ServTex Facility

FEATURE ID / FEATURE CHARACTERISTICS

1A LOCATION	1B TYPE (1)	1C POINTS	2 GEOLOGIC FORMATION	3 VERTICAL FEATURE (FEET) C, CD, SC, SH: X	Y	Z	4 HORIZONTAL FEATURE (FEET) C, SC: X	Y	Z	5 LENGTH & WIDTH (FEET) FZ, FR, VR, Z	6 TREND (C, CD, FR, FZ, SC, SH): DIRECTION	DOMINANT 10	7 DENSITY (FR, VF): LOW 0	MODERATE 5	HIGH 10	8 APERTURE (FR, VR): SMALL 0	MEDIUM 5	LARGE 10	9 INFILLING (CD, FR, FZ, SC, SH, VR): CEMENTED 0	FINE 5	COARSE 10	NONE 15
568624, 3279035	CD-1	10	Kep	10	30	2.5					N80E	N								5		
568615, 3279081	CD-2	10	Kep	4	4	1.5					N85W	N								5		
568624, 3279035	CD-3	10	Kep	4	8	1.5					N85W	N								5		

FEATURE CHARACTERISTICS (cont.) / PHYSICAL SETTING

1A LOCATION	10 RELATIVE INFILTRATION RATE: NONE/LOW 0	MODERATE 10	HIGH 30	11 SUB-TOTAL	12 SENSITIVITY: NOT <25	POSSIBLE 25 - 60	SENSITIVE >60	13 DRAINAGE AREA (ACRES): <1 (0)	<10 (5)	<50 (10)	>50 (15)	14 TOPOGRAPHY (2): WALL 0	HILLTOP 5	HILLSIDE 10	FLOODPLAIN 15	STREAM BED 20	15 SUB-TOTAL	16 POTENTIAL RECHARGE: NONE/LOW <15	MODERATE 15 -20	HIGH >20	17 COMMENTS: YES
568624, 3279035	0			15	15				5					10			15		15		YES
568615, 3279081	0			15	15			0						10			10	10			YES
568624, 3279035	0			15	15			0						10			10	10			YES

(1) C = 35, CD = 10, FR = 0, FZ = 15, MM = 35,
SC = 10, SH = 20, VR = 0, ZONE = 35

(2) WALL = Vertical/near vertical wall above 100-yr floodplain
FLOODPLAIN = 100-yr floodplain
STREAM BED = Ordinary High Water Mark
* - Locationsin NAD 27

TNRCC-0585-Table (Rev. 6/1/99)

HANSON\FINAL\01065\
T020218_GEO ASSMT.XLS

I have read, understood, and followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

Doug Deaye (signature) — Geologist signature

3/28/02 — Date

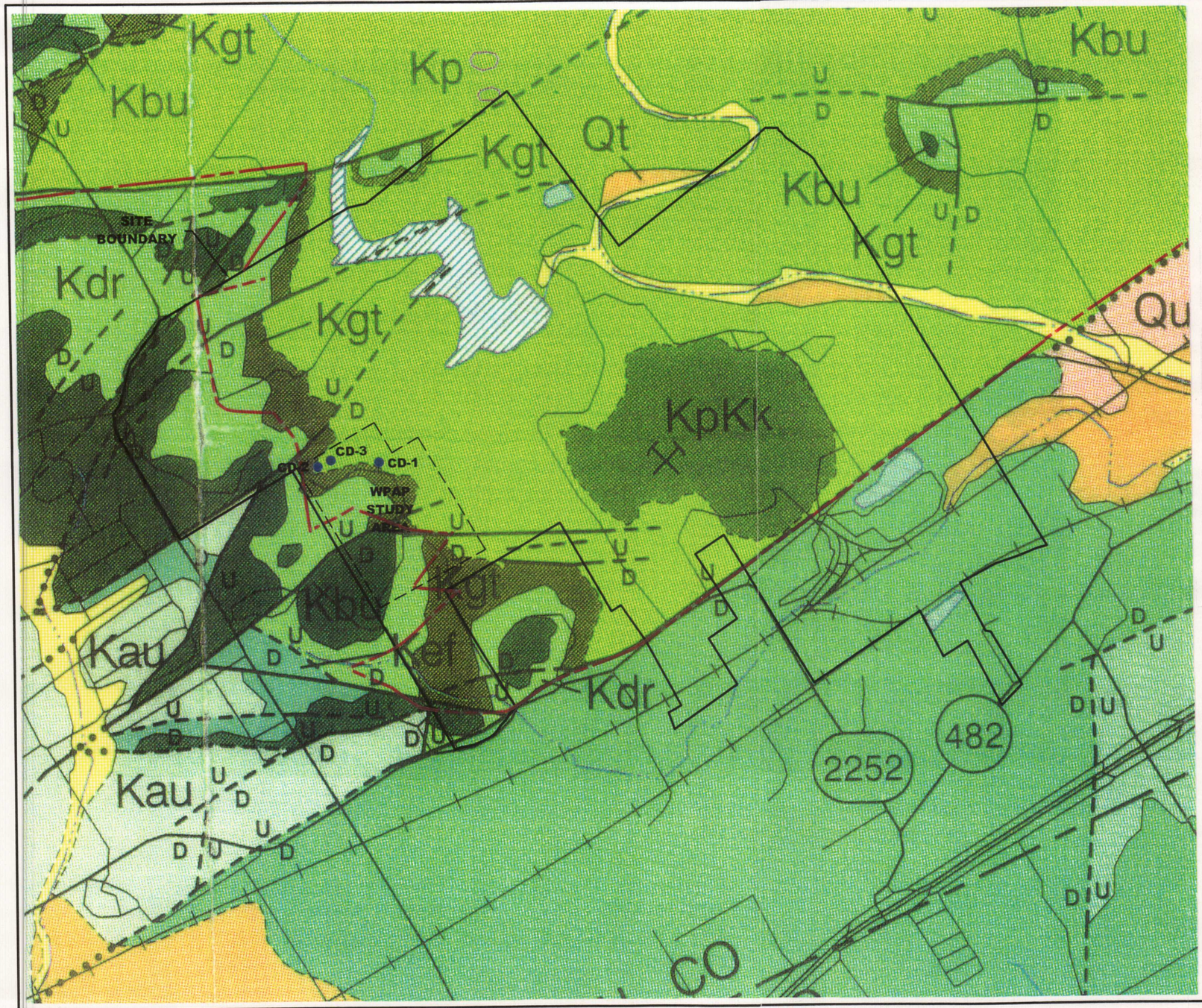
Sheet _____ of _____

5.0 SITE SPECIFIC GEOLOGY

Surface outcrops of the Person Formation (Kep) were observed over about 20 percent of the site's surface. Based on observations of the working face of the adjacent surface mine, this unit is at least 80 to 90 feet thick at the site. Outcrops of the limestone/dolomitic limestone were almost entirely non-fractured at the surface. Typically, horizontally bedded, non-fractured limestone was observed at the site's surface. Exceptions to the fracturing were found in areas where tree removal activities have previously taken place. In addition, man-made disturbances were observed in the central portions of the site's surface. In these areas, minor vertical fracturing was observed. Chert was observed in the surface soil during the site survey. There were no in-situ karst features observed on-site. However, numerous circular features were observed across the site. Based on visual observations and professional judgment, these features were determined to be the result of clearing activities of the previous landowner. Three of these features are identified on the Geologic Assessment Table. Two of the features (CD-2 and CD-3) were identified due to the presence of voids located in the bottom of the depressions. The voids are believed to be the result of animal burrows or removed root systems. The third feature (CD-1) was identified because it is located in a natural drainage feature. Due to the closed depression surface water ponds in this area and is therefore more prone to infiltration.

Based on interpretations, surface elevations at the site dip to the north toward a natural drainage feature. There are no streams on-site although there are two or three preferential drainage routes that eventually join near the north central portion of the site.

Stratigraphically, Edwards Limestone formations outcrop over a portion of the site. These formations, including the Kep, could have the ability to transmit surface water to the Edwards Aquifer if the appropriate surface and subsurface features are present.



2000 1000 0 2000

(SCALE IN FEET)

N

QUATERNARY

- Qt — Terrace alluvium; gravel, sand, silt, and mud
- Qu — Undivided slope-wash, drainageway, and terrace alluvium; gravel, sand, silt, and mud

UPPER CRETACEOUS

- Kau — Austin Group; chalk, limestone, and argillaceous limestone
- Kef — Eagle Ford Formation; shale to mudstone, siltstone, and flaggy limestone
- Kbu — Buda Formation; limestone
- Kdr — Del Rio Formation; clay–claystone to mud–mudstone

LOWER CRETACEOUS

- Kgt — Georgetown Formation; limestone and argillaceous limestone

Edwards Group: Kainer (Kk), Person (Kp), Fort Terrett (Kft), and Segovia (Ks) Formations

Platform setting, Balcones Fault Zone	Platform setting, Edwards Plateau
Kp	Ks
Kk	Kft
Kw	

- Kp — Person Formation; limestone, dolomitic limestone, dolomite, and lesser argillaceous limestone; approximately equivalent to Segovia Formation of eastern Edwards Plateau
- KpKk — Undivided Kainer and Person Formations

RECHARGE BOUNDARY

BASE MAP SOURCE:
BUREAU OF ECONOMIC GEOLOGY
MISCELLANEOUS MAP NO. 39
GEOLOGIC MAP OF NEW BRAUNFEL, TX.

REV.	DATE	DESCRIPTION	DR BY	APP BY

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
HANSON AGGREGATES WEST, INC.
NEW BRAUNFELS, TEXAS

SHEET TITLE:
SITE GEOLOGIC MAP

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 01065
CHK BY	DHG		CJI NO. 01065003
APP BY	SLC		SHEET 1 OF 1 SHEETS
DATE ISSUED: 03-22-2002			FIGURE NO. 1
PURPOSE: TNRCC REVIEW			

AGENT AUTHORIZATION FORM
FOR REQUIRED SIGNATURE
EDWARDS AQUIFER PROTECTION PROGRAM
RELATING TO 30 TAC CHAPTER 213
EFFECTIVE JUNE 1, 1999

I W.E. Winter Jr.,
Print Name

Title – Vice President

of

Hanson Aggregates South Central Region

have authorized

Steve Cook, P.E.

of

Cook-Joyce, Inc.

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Natural Resource Conservation Commission (TNRCC) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TNRCC's approval letter. The TNRCC is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and the forms must accompany the completed application.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TNRCC cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. For applicants who are not the property owner, but who have the right to control and possess and control the property, additional authorization is required from the owner.

W.E. Winter Jr. — Applicant's Signature

4-3-02 — Date

THE STATE OF TEXAS '

County of DALLAS '

BEFORE ME, the undersigned authority, on this day personally appeared W.E. WINTER, JR known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 3RD day of April, 2002

Donna G Oliver
NOTARY PUBLIC

DONNA G OLIVER
NOTARY PUBLIC
State of Texas
Comm. Exp. 11-08-2005

Typed or Printed Name of Notary

MY COMMISSION EXPIRES:_____

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
EDWARDS AQUIFER PROTECTION PLAN
APPLICATION FEE FORM

NAME OF PROPOSED PROJECT: Hanson Aggregates West, Inc. - Servtex Facility
PROJECT LOCATION: 21303 FM 2252, Garden Ridge, Texas 78132
NAME OF APPLICANT: Hanson Aggregates West, Inc.
APPLICANT'S ADDRESS: PO Box 190999, Dallas, Texas 75219-0999
CONTACT PERSON: Steve Cook, P.E., agent for Hanson PHONE: 512/474-9097
Please Print

AUSTIN REGIONAL OFFICE (3373)
☐ Hays
☐ Travis
☐ Williamson

SAN ANTONIO REGIONAL OFFICE (3362)
☐ Bexar
☒ Comal
☐ Kinney
☐ Medina
☐ Uvalde

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT**. THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

☒ **SAN ANTONIO REGIONAL OFFICE**
☐ **Mailed to TNRCC:**
TNRCC - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ **AUSTIN REGIONAL OFFICE**
☐ **Overnight Delivery to TNRCC:**
TNRCC - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-0347

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement, Non-residential	180 Acres	$5,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

W. E. Winter Jr.
Signature

4-3-02
Date

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

EDWARDS AQUIFER PROTECTION PLAN

APPLICATION FEE SCHEDULE

30 TAC §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

WATER POLLUTION ABATEMENT PLANS AND MODIFICATIONS

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

ORGANIZED SEWAGE COLLECTION SYSTEMS AND MODIFICATIONS

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEM FACILITY PLANS AND MODIFICATIONS

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	$500	$500 - $5,000

EXCEPTION REQUESTS

PROJECT	FEE
Exception Request	$250

EXTENSION OF TIME REQUESTS

PROJECT	FEE
Extension of Time Request	$100

WATER POLLUTION ABATEMENT PLAN APPLICATION
FOR REGULATED ACTIVITIES
ON THE EDWARDS AQUIFER RECHARGE ZONE
AND RELATING TO 30 TAC §213.5(b), EFFECTIVE JUNE 1, 1999

PROJECT NAME: Hanson Aggregates South Central Region – Servtex Facility

PROJECT INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots: ____
   - ___ Residential: # of Living Unit Equivalents: ____
   - ___ Commercial
   - X Industrial
   - ___ Other: _____

2. Total site acreage (size of property): 180 acres – project site = approximately 110 acres

3. Projected population: N/A

4. The amount and type of impervious cover expected after construction are shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0	÷ 43,560 =	
Parking	0	÷ 43,560 =	
Other paved surfaces	0	÷ 43,560 =	
Total Impervious Cover	0	÷ 43,560 =	
Total Impervious Cover ÷ Total Acreage x 100 =			*

5. X **ATTACHMENT A - Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.

6. X Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

FOR ROAD PROJECTS ONLY
Complete questions 7-12 if this application is exclusively for a road project.
N/A – not exclusively a road project.

7. Type of project:
   - ___ TXDOT road project.
   - ___ County road or roads built to county specifications.
   - ___ City thoroughfare or roads to be dedicated to a municipality.
   - ___ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:
   ___ Concrete
   ___ Asphaltic concrete pavement
   ___ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.
   Width of R.O.W.: _____ feet.
   L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.
    Width of pavement area: _____ feet.
    L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
    Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = ____% impervious cover.

11. ___ A rest stop will be included in this project.
    ___ A rest stop will **not** be included in this project.

12. ___ Maintenance and repair of existing roadways that do not require approval from the TNRCC Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TNRCC.

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

13. **ATTACHMENT B - Volume and Character of Stormwater.** A description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

14. The character and volume of wastewater is shown below:

___ % Domestic	0 gallons/day
___ % Industrial	0 gallons/day
___ % Commingled	0 gallons/day
TOTAL	0 gallons/day

15. Wastewater will be disposed of by:
    ___ **On-Site** Sewage Facility (OSSF/Septic Tank):
    ATTACHMENT C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.
    ___ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC §285.

__ Sewage Collection System (Sewer Lines):

__ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

__ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

__ The SCS was previously submitted on _____.

__ The SCS was submitted with this application.

__ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to executive director approval.

The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is :

__ existing.

__ proposed.

None of the above apply. Domestic wastewater is not disposed on-site. Domestic wastewater is collected and held in port-o-lets and septic storage tanks until disposed offsite.

16. N/A All private service laterals will be inspected as required in 30 TAC 213.5.

SITE PLAN REQUIREMENTS. Items 17 through 27 must be included on the Site Plan.

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 2000'.

18. 100-year floodplain boundaries

__ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

X No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):
Flood Insurance Rate Map
Community Panel #485463 0095 D , July 17, 1995

19. __ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.

__ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.
N/A (Final grade elevations of bottom of mine)

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

__ There are ___(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

__ The wells are not in use and have been properly abandoned.

__ The wells are not in use and will be properly abandoned.

__ The wells are in use and comply with 30 TAC §238.

X There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:

X All **sensitive and possibly sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.

__ No **sensitive and possibly sensitive** geologic or manmade features were identified in the Geologic Assessment.

__ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. Geologic or manmade features were found and are shown and labeled.

__ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. No geologic or manmade features were found.

22. X The drainage patterns and approximate slopes anticipated after major grading activities.

23. X Areas of soil disturbance and areas which will not be disturbed.

24. X Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. X Locations where soil stabilization practices are expected to occur.

26. X Surface waters (including wetlands).

27. __ Locations where stormwater discharges to surface water or sensitive features.
X There will be no discharges to surface water or sensitive features.

ADMINISTRATIVE INFORMATION

28. X One (1) original and three (3) copies of the completed application have been provided.

29. X Any modification of this WPAP will require TNRCC executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **WATER POLLUTION ABATEMENT PLAN APPLICATION FORM** is hereby submitted for TNRCC review and executive director approval. The form was prepared by:

Steve Cook, P.E.
Print Name of Applicant/Owner/Agent

STATE OF TEXAS
STEPHEN L. COOK
42203
REGISTERED PROFESSIONAL ENGINEER

Signature of Applicant/Owner/Agent 3/27/02 Date

ATTACHMENT A

FACTORS AFFECTING WATER QUALITY

Factors that potentially affect surface water and groundwater quality would be any soil-disturbing activities. However, because the groundwater in the area is located at a depth of approximately 150 feet below surface grade, groundwater impacts are not anticipated.

Surface water could be impacted by storm water runoff from the disturbed areas of the project site. Soils would be somewhat disturbed during clearing and grubbing, removal of topsoil, blasting, and quarrying. Hanson utilizes non-structural and structural controls to minimize the impact of storm water runoff. Non-structural controls include the prohibition of topsoil removal or blasting during high wind or storm events. Structural controls include, as needed:

- Silt fencing;
- Diversion berms.
- Diversion ditch

ATTACHMENT B

VOLUME AND CHARACTER OF STORMWATER

Runoff Coefficient Prior to Construction:

Soil Type: Rumple-Comfort: 80%, Impervious Limestone: 20%

Pasture Land – Poor condition, Runoff Coefficient – 0.05-0.50 (Fundamentals of Hydraulic Engineering Systems)

Since Rumple is fairly impermeable, use c = 0.50. For Limestone, c can be assumed as 0.95.

Pre-construction Runoff Coefficient = 0.8 x (0.5) + 0.2 x (0.95) = 0.59

Post Construction Runoff Coefficient:

After completion of the quarrying operation, storm water falling on area will be captured within the quarry.

Area disturbed but not quarried will be returned to pasture; therefore, the runoff coefficient will be much smaller than 0.59.

Storm Water Runoff:

Storm water runoff was calculated using HEC-HMS (Hydrologic Modeling System) for 25-year, 24-hour storm event.

Storm water contributing from off-site areas is calculated based on the following

Drainage Area: 0.357 square miles
SCS Curve Number: 89 (Type D soil and poor pasture)
Storm Depth: 7.85 inches
Lag time: 26 minutes

The model calculated 1038 cubic feet per second peak discharge by utilizing the SCS curve number method and using above inputs (See printout of the model)
On-site storm water runoff was calculated as 670 cubic feet per second by using the below inputs and utilizing the same SCS curve number method (See printout of the model)

Area: 0.195 square miles
Storm Depth: 7.85 inches
Lag time: 20 minutes

A proposed ditch on the south west side of the property will be constructed to divert upgradient surface water from flowing over the disturbed areas or the mining operation. It will start from the mine limit (elevation around 890 feet) and will be constructed with 1.5% slope, consistent with the existing topography of the site as shown on Figure 2.

The disturbed area storm water runoff will be prevented from leaving the area by constructing a diversion berm adjacent to the mine face and disturbed area. On-site storm water from the disturbed area will be captured within the quarry.

CHARACTER OF STORMWATER AND TSS REMOVAL CALCULATIONS

Storm water retention practices are characterized by the capture and disposal of runoff without direct release of captured flow to receiving streams. The storm water runoff from this project site will be captured in the mining area.

The following calculations show that the retention of the on-site storm water in the mining area will satisfy the Edwards rule requiring 80% reduction in the increase in TSS storm water loading.

The site location information required for the calculations:

- The site is currently undeveloped (0% impervious cover);
- Soils are Hydrologic Group B/D (Edwards Limestone);
- Infiltration Rate for Type D is 1.3 inch/hour;

- The proposed disturbed area is 110 acres;
- The site is located in Comal County
- No runoff enters the site from upgradient (it is directed around the development by the proposed drainage channel in the Structural Practices (Attachment F of the TNRCC Form No: 0602).

For the following TSS Load calculations the TNRCC Technical Guidance Manual (TGM) was used.

Background Load Calculation:

The background load for undeveloped project site is calculated from:

$L = P \times (A_u \times 0.54 + A_d \times R_v \times 38.4)$

L = Annual Pollutant Load (lbs)

A_u = Area of the undeveloped portion of the tract (acres)

A_d = Area of the developed portion of the tract (acres)

P = Average Annual Precipitation (inches)

R_v = Runoff coefficient for the fraction of impervious cover

$R_v = 0.546 \times (IC)^2 + 0.328 \times (IC) + 0.03$

IC = Impervious Cover (Assume 20% because of the impervious limestone)

$R_v = 0.546 \times (0.2)^2 + 0.328 \times (0.2) + 0.03 = 0.12$

Average Annual Rainfall for Comal County is 33 inches.

$L = 33 \times (110 \times 0.54 + 0.0 \times 0.12 \times 38.4)$

L = 1,960 lbs/yr

Post Development Load:

$L = A \times P \times R_v \times 38.4$ $R_v = 0.12$ (does not change because of the mining operation)

For the project site;

$L = 110 \times 33 \times 0.12 \times 38.4 = 16{,}727$ lb/yr

Required Removal:

Removal of 80% of the increase in TSS loading is calculated by

Required Reduction = $0.8 \times (16{,}727 - 1{,}960) = 11{,}814$ lb/yr

The load produced by the post development conditions (mining operations) will be retained within the mining area.

Retention of Storm Water and Capture Volume Calculations:

$L_R = L_I \times F \times$ Fraction of site for retention x (TSS Removal Efficiency)

$11{,}814 = 16{,}727 \times F \times 0.8 \times 1.0$ $F = 0.88$

Therefore, the fraction of the load that must be captured to achieve the 80% reduction is 0.88. Interpolating from Figure 3.8 of the Technical Design Manual, the runoff depth associated with a fraction captured of 0.88 and impervious cover of 20% is 0.31 inches. The capture volume is calculated by multiplying the runoff depth times the site area (110 acres), so the required water quality volume is 123,783 cubic feet.

For this project, 80% of the 110-acre site is pervious which is 88 acres or 3,833,280 square feet. The infiltration rate for the existing formation (Rumple Comfort, RUD formation) ranges from 0.6-2 in/hr. The average is 1.3 in/hr. Therefore; the time required for this volume to infiltrate is around 0.025 hours or 2 minutes.

HMS * Summary of Results

Project : 01065.01 Run Name : Run 2

Start of Run	: 05Dec01 0000	Basin Model	: Basin 1
End of Run	: 06Dec01 0000	Met. Model	: Met 1
Execution Time	: 21Dec01 0809	Control Specs	: Control 1

Hydrologic Element	Discharge Peak (cfs)	Time of Peak	Volume (ac ft)	Drainage Area (sq mi)
Subbasin-1	1038.3	05 Dec 01 1218	123.59	0.357

HMS * Summary of Results

Project : 01065.01 Run Name : Run 2

Start of Run	: 05Dec01 0000	Basin Model	: Basin 1
End of Run	: 06Dec01 0000	Met. Model	: Met 1
Execution Time	: 21Dec01 0808	Control Specs	: Control 1

Hydrologic Element	Discharge Peak (cfs)	Time of Peak	Volume (ac ft)	Drainage Area (sq mi)
Subbasin-1	670.41	05 Dec 01 1212	67.627	0.195

TEMPORARY STORMWATER SECTION
FOR REGULATED ACTIVITIES
ON THE EDWARDS AQUIFER RECHARGE ZONE
AND RELATING TO 30 TAC §213.5(b)(4)(A), (B), (D)(i) and (G); EFFECTIVE JUNE 1, 1999

PROJECT NAME: Hanson Aggregates South Central Region - Servtex Facility

POTENTIAL SOURCES OF CONTAMINATION

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

   ___ Aboveground storage tanks with a cumulative storage capacity of less that 250 gallons will be stored on the site for less than one (1) year.

   ___ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

   ___ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TNRCC prior to moving the tanks onto the project.

   _X_ Fuels and hazardous substances will not be stored on-site.

2. _X_ **ATTACHMENT A - Spill Response Actions.** A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.

3. _NA_ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. _X_ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.

   ___ The are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. _X_ **ATTACHMENT C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. _X_ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Dry Comal Creek

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. **All structural BMPs must be shown on the site plan.**

7. _X_ **ATTACHMENT D - Temporary Best Management Practices and Measures.** A description of the TBMPs and measures that will be used during and after construction are provided at the end of this form. For each activity listed in the sequence of construction, include appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

_X_ TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information has been provided in the attachment at the end of this form

a. A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

b. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

d. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TNRCC inspections, or during excavation, blasting, or construction.

8. The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

__ **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

_X_ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. _X_ **ATTACHMENT F - Structural Practices.** Describe the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site. Placement of structural practices in floodplains has been avoided.

10. X **ATTACHMENT G - Drainage Area Map**. A drainage area map is provided at the end of this form to support the following requirements.

__ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

__ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

X For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

__ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

Refer to Figure 2 "Stormwater Control Measures" Map at the end of the Permanent Storm water Section.

11. __ **ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure has been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are provided as at the end of this form.

12. X **ATTACHMENT I - Inspection and Maintenance for BMPs.** A plan for the inspection of temporary BMPs and measures and for their timely maintenance, repair, and, if necessary, retrofit is provided at the end of this form. A description of documentation procedures and recordkeeping practices is included in the plan.

13. X All control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicates a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. X If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. X Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. X Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

SOIL STABILIZATION PRACTICES

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. X **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached at the end of this form.

18. X Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. X Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

ADMINISTRATIVE INFORMATION

20. X All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. X If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TNRCC Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TNRCC has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. X Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **TEMPORARY STORMWATER SECTION** is hereby submitted for TNRCC review and executive director approval. The application was prepared by:

Steve Cook, P.E.
Print Name of Applicant/Owner/Agent

STATE OF TEXAS
STEPHEN L. COOK
49203
REGISTERED PROFESSIONAL ENGINEER

Signature of Applicant/Owner/Agent

3/27/02
Date

ATTACHMENT A

SPILL RESPONSE ACTIONS

A description of the measures to be taken to contain any spill of hazardous substances is provided in the Spill Prevention Control and Countermeasure Plan, which is attached to the end of this section.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN
PART I
GENERAL INFORMATION

1. Name of facility Hanson Aggregates West, Inc.

2. Type of facility Rock Crushing Plant

3. Location of facility New Braunfels, TX
   Nacogdoches Rd. and FM 2252

4. Name and address of owner or operator:
   Name Hanson Aggregates West, Inc.
   Address 8505 Freeport Parkway, Suite 200
   Irving, Texas 75063

5. Designated person accountable for oil spill prevention at facility:
   Name and Title: John Faust - Plant Manager

MANAGEMENT APPROVAL

The SPCC Plan will be implemented as herein described.

Signature: W. E. Winter Jr.

Name: William E. Winter

Title: Senior Vice-President Operations

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Clyde C. Ding
Printed Name of Registered Professional Engineer

Clyde C Ding
Signature of Registered Professional Engineer

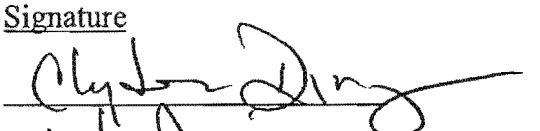
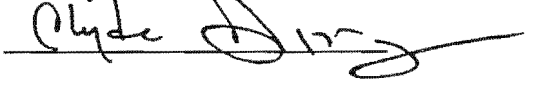
Registration No. 50653 State Texas

(Seal)
Date Aug. 6, 2001

Clyde C Ding

SPILL PREVENTION CONTROL AND COUNTERMEASURE
COMPLIANCE INSPECTION PLAN
REVIEW PAGE

In accordance with 40 CFR §112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Hanson Aggregates West, Inc. will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. July 27, 1993	
2. June 3, 1996	
3. August 9, 1999	
4. August 9, 2002	

PART I
GENERAL INFORMATION

7. Potential Spills -- Prediction and Control

Source	Major Type of Failure	Quantity (bbls)	Rate (bbls/hr)	Direction of Flow	Secondary Containment
Gasoline	Tank Rupture	10000 gal	Instantaneous	w/in Contained Area	Concrete retaining tank
#1 & #2 Diesel	Tank Rupture	2-12000 gal	Instantaneous	" "	" "
#3	Tank Rupture	1000 gal	Instantaneous	" "	" "
#4	Tank Rupture	5876 gal	Instantaneous	" "	" "
#5	Tank Rupture	10000 gal	Instantaneous	" "	" "
#6	Tank Rupture	520 gal	Instantaneous	" "	" "
#7	Tank Rupture	270 gal	Instantaneous	" "	" "
Waste Oil	Tank Rupture	1000 gal	Instantaneous	" "	" "
Oil	Tank Rupture	5-5000 gal	Instantaneous	" "	" "
ASPHALT OIL					
AC-20	Tank Rupture	30000gal	Instantaneous	" "	" "
AC-3 & Primer	Tank Rupture	2- 15000 gal	Instantaneous	" "	" "
Precoat oil & AES-300	Tank Rupture	2- 15000 gal	Instantaneous	" "	" "
Antistrip	Tank Rupture	5000 gal	Instantaneous	" "	" "
Gasoline	Inlet or Outlet could Pull out of tank	1- 10000 gal	25 bbls/hr	" "	" "
#1 & #2 Diesel	Inlet or Outlet could	2- 12000 gal	25 bbls/hr	" "	" "
#3	Pull out of tank	1- 1000 gal	25 bbls/hr	" "	" "
#4		1- 5876 gal	25 bbls/hr	" "	" "
#5		1 -10000 gal	25 bbls/hr	" "	" "
#6		1 520 gal	25 bbls/hr	" "	" "
#7		1 270 gal	25 bbls/hr	" "	" "
Waste Oil	Inlet or Outlet could Pull out of tank	1- 1000 gal	25 bbls/hr	" "	" "
Oil	" "	5-5000 gal	25 bbls/hr	" "	" "
ASPHALT OIL					
AC-20	Inlet or Outlet could	1-30000 gal	25 bbls/hr	" "	" "
AC-3 & Primer	pull out of tank	2-15000 gal	25 bbls/hr	" "	" "
Precoat oil & AES-300	" "	2-15000 gal	25 bbls/hr	" "	" "
Antistrip	" "	5000 gal	25 bbls/hr	" "	" "

Discussion: Rupture could occur as tank is being filled by delivery tank truck.

*Attach Map

Name of Facility Servtex

Operator Hanson Aggregates West, Inc.

PART I
GENERAL INFORMATION

(Response to statements should be: Yes, No or N/A)

8. Containment or diversionary structures or equipment to prevent oil from reaching Navigable water are practicable. (If NO, complete Attachment #2) YES

9. Inspection and records
   A. The required inspections follow written procedures YES
   B. The written procedures and a record of inspections, signed by the appropriate supervisor or inspector, are attached.
   Discussion: The dikes around the tanks will be visually inspected on the first day of each month by the plant manager or his assistant, who will sign a logbook stating that the dikes are sound. He will also visually check the outside of the storage tank to determine if any deterioration has taken place in the metal. Written procedures and a record of inspections are maintained for a period of three years.

10. Personnel Training and Spill Prevention Procedures
   A. Personnel are properly instructed in the following:
      1) operation and maintenance of equipment to prevent oil discharge, and YES
      2) applicable pollution control laws, rules and regulations YES
      Describe procedures employed for instruction: A special key is required to dispense fuel, though valves are not locked. Employees will use bulldozers or other earthmoving equipment to build up dikes if they appear to be breaching. At least one employee on each shift of each job will be responsible for notifying the appropriate agencies if a spill should occur.

   B. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan YES
   Describe briefing program: On the first day of each month the mine management will brief key personnel to be sure to know what to do in case of a spill and what appropriate action is to be taken if a preplanned spill prevention structure appears not to be able to contain the spill. The plant manager will note the date and details of the briefing in his logbook. The logbook will be kept at the main office of the plant.

Name of facility Servtex

Operator Hanson Aggregates West, Inc.

PART I
GENERAL INFORMATION

Additional information needed by this office:

Phone Area Code 830 Phone Number 625-3614

County Comal

Nearest navigable waters* Name Bremar Creek

Direction East
(to waters from site)

To what body of water do the above waters run into: Comal River

Is your site located in a flood plain No

Does this site discharge into any waters: Yes X No

If yes, what waters: Bremar Creek

If yes, does site have water discharge permit: EPA Yes
State Yes

If no, how does facility eliminate waste water:
Public Sewer
Closed System x
Holding Pond x

*If facility uses holding ponds for water reuse, does water in ponds ever become contaminated with oil/fuel: Yes No x

If Yes, how do you eliminate oil contamination in order to reuse the water

If Yes, is it possible for water in holding ponds to overflow or run into navigable waters:
Yes No x

How many hours per day is someone at the site 24

**Navigable waters includes not only rivers, lake, streams, but also creeks, tributaries of navigable waters, etc. In this instance it does not mean that a boat could be used on it for it to be navigable.

FACILITY DESCRIPTION

Hanson Aggregates West, Inc., Servtex plant, is a limestone mining and crushing facility located in New Braunfels, TX. The facility receives gasoline, diesel, and asphalt oil via an outside contracting company. All of the tanks are contained in fully enclosed concrete dikes. Each containment area is covered by a roof to minimize the amount of stormwater entering the diked areas.

Hours of operation at the Servtex location are 24 hours a day. At night a security guard is present and only one (1) entrance is available into the plant. The number of personnel on the day shift is approximately 85, which include the Plant Manager, Assistant Plant Manager, 2 foremen, 5 office workers, 30 pit and plant operators and 20 maintenance personnel and various other employees. The number of personnel on the night shift is approximately 25 people, which include loader operators, welders, electricians, and other operators, and a loadout crew.

Operations at this limestone mining & crushing operation began in 1937, under the Servtex Company. In 1978, Gifford-Hill, which became Beazer, which is now Hanson, took control of this facility. A new plant was recently put into operation in 1998. The new plant consists of a primary crushing area, screening area, & a loadout facility.

In 1998, we constructed a ventilated roof over the Asphalt plant tanks. We recently moved the railroad diesel tank to the end of the spur near the old EE plant. The diesel tanks is now contained in a fully enclosed concrete dike and has a roof over it.

All of Hanson's tanks are located inside an old quarry. The likelihood of a spill entering a creek or unknown tributary and then into waters of the U.S. is minimal.

PART II
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)

A. Facility Drainage

1. Drainage from diked storage areas is controlled as follows (include operating description of valves, pumps, ejectors, etc. (Note: Flapper-type valves should not be used):

A portable pump will be used to evacuate the diked storage area should a spill occur. Pump is kept on site. Pump is a diaphragm pump that works off of air pressure.

2. Drainage from undiked areas is controlled as follows (include description of ponds, lagoons, or catchment basins and methods of retaining and returning oil to facility):

Not applicable

3. The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open watercourse is as follows (include description of (a) inspection for pollutants, and (b) method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment No.3):

Roofs has been installed over all containment areas to prevent rainwater from entering. If rainwater does enter containment area it is not discharged but left alone until evaporation. Containment areas are substantially oversized to accommodate a significant amount of rainwater accumulations.

Name of Facility Servtex

Operator Hanson Aggregates West, Inc.

PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)
(Response to statements should be: Yes, No, or N/A)

B. Bulk Storage Tanks

1. Describe tank design, materials of construction, fail safe engineering features, and if needed, corrosion protection: All of our tanks are built to underwriters specifications. Heads and shells are ¼" plates. Welding and design are also to underwriters specifications. The tanks are purchased from a tank mfg. Above ground tanks are coated with zinc chromate paint.
2. Describe secondary containment design, construction materials, and volume: Concrete retaining walls with a concrete floor. Sump pit installed for pump locations. Oil drums & barrels are located inside covered metal containment areas located throughout the plant site. The containment area is large enough to contain the contents of the largest container stored.
3. Describe tank inspection methods, procedures, and record keeping: Tanks to be visually inspected monthly along with containment area inspection. See Attachment #3 for inspection method, procedure & record keeping.
4. Internal heating coil leakage is controlled by one or more of the following control factors: N/A
   (a) Monitoring the steam return or exhaust lines for oil. Describe monitoring procedure: Diesel fuel is never heated at this job site.
   (b) Passing steam return or exhaust lines through a settling tank, skimmer or other separation system: N/A
   Installing external heating systems. N/A
5. Disposal facilities for plant effluents discharged into navigable waters are observed frequently for indication of possible upsets which may cause an oil spill event. N/A
   Describe method and frequency of observations
   No effluents are ever discharged from this facility.

PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)

(Response to statements should be: Yes, No, or N/A)

C. Facility Transfer Operations, Pumping, and In-Plant Process

1. Corrosion protection for buried pipelines:
   (a) Pipelines are wrapped and coated to reduce corrosion. N/A
   (b) Cathodic protection is provided for pipeline if determined necessary by electrolytic testing. N/A
   (c) When a pipeline section is exposed, it is examined and corrective action is taken as necessary. Yes
2. Pipeline terminal connections are capped or blank-flanged and marked if the pipeline is not in service or on standby service for extended periods. Yes
   Describe criteria for determining when to cap or blank flange
   The outlet pipes are double valved. The inlet pipe or filler pipe has a valve cut off when not in use.
3. Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. Yes
   Describe pipe support design:
   The inlet and outlet pipes are supported by the tank on one end and the dike on the other end.
4. Describe procedures for regularly examining all above-ground valves and pipelines (including flange joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces):
   Very little of the piping extends beyond the dike where the pipe deadends. These are examined daily by the operators who notify the foreman if corrective action is required. Corrective action, should it be necessary, will be recorded in the plant manager's logbook.
5. Describe procedures for warning vehicles entering the facility to avoid damaging aboveground piping: The outlet hose is the only part of the system extending beyond the dike and it is only in operation when the pump motor is turned on.

Name of Facility Servtex

Operator Hanson Aggregates West, Inc.

PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)
(Response to statements should be: Yes, No, or N/A)

D. Facility Tank Car & Tank Truck Loading/Unloading Rack

Tank car and tank truck loading/unloading occurs at the facility. (If Yes, complete 1 thru 5 below). YES

1. Loading/unloading procedures meet the minimum requirements and regulations of the Department of Transportation. YES

2. The unloading area has a quick drainage system. NO

3. The containment system will hold the maximum capacity of any single compartment of a tank truck loaded/unloaded in the plant. YES
   Describe the containment system design, construction materials and volume:
   Concrete retaining walls and concrete floor with a sump pit for pumping of spilled materials

4. An interlocked warning light, a physical barrier system, or warning signs are provided in loading/unloading areas to prevent vehicular departure before disconnect of transfer lines. NO
   Describe methods, procedures, and/or equipment used to prevent premature Vehicular departure: One tank truck delivers fuel to the job. The driver waits until all the fuel is pumped out and then unhooks his hose. Wheel chocks are used to prevent a spill due to accidental departure.

5. Drains and outlets on tank trucks and tank cars are checked for leakage before loading/unloading for departure. YES

Name of Facility Servtex

Operator Hanson Aggregates West, Inc

PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)

(Response to statements should be: Yes, No, or N/A)

E. Security

1. Plants handling, processing, or storing oil are fenced.
   Yes

2. Entrance gates are locked and/or guarded when the plant is unattended or not in production. Yes

3. Any valves which permit direct outward flow of a tank's contents are locked closed when in non-operating or standby status. Yes

4. Starter controls on all oil pumps in non-operating or standby status are:
   (a) locked in the off position: Yes
   (b) located at site accessible only to authorized personnel _____

5. Discussion of items 1 thru 4 as appropriate:
   Person in charge of security locks all gates at night, which leaves only one entrance/exit to the plant. Tank valves are not locked, but do require a special key for authorized personnel to dispense fluids.

6. Discussion of the lighting around the facility:
   Facility is well lit at night at entrance and also around fuel tank areas.

Name of Facility Servtex

Operator Hanson Aggregates West, Inc.

This page is to be filled out only if you responded NO to #8 of Part I.

SPCC PLAN, ATTACHMENT #2
OIL SPILL CONTINGENCY PLAN AND
WRITTEN COMMITMENT OF MANPOWER, EQUIPMENT AND MATERIALS

Secondary containment of diversionary structures are impracticable for this facility for the following reasons (attach additional pages if necessary):

A strong oil spill contingency plan is attached for plant Yes – See Contingency Plant

A written commitment of manpower, equipment and material is attached Yes

Name of facility Servtex

Operator Hanson Aggregates West, Inc.
(Attachment #2, SPCC Plan)

WRITTEN COMMITMENT OF MANPOWER, EQUIPMENT AND MATERIALS:

Hanson will do everything in its power to minimize the affects of a spill at this facility. The supervisory manpower includes the following two people:

John Faust – Plant Manager
David Ritter – Asst. Plant Manager

There are various equipment operators and equipment to be used on every shift to help control a spill through the use of tertiary earth berm containment areas. The appropriate equipment available for this job are dozers, loaders, scrapers, haul trucks, maintainers, & a bobcat. The stockpiled material to use in case of a spill is located to the South of the welding shop along the face of an old quarry wall. Hanson also has absorbent booms available at the shops and various locations throughout the plant.

ATTACHMENT #3

CONTAINMENT VOLUME CALCULATIONS

CONTAINMENT A

1. Volume of tank 10,000 gallon Gasoline tank
   8' diameter x 26' 8" length

2. Dimensions of Dike = 34' 1 ½" x 17' 6 ½" x 4' 0"

3. Total Diked Volume = L x W x H = 2394.44 cu.ft.

   = 2394.44 cu. ft. $\left(\frac{7.48 \text{ gal}}{\text{cu.ft.}}\right)$ = 17910.41 gallons

4. Total Volume of Vertical Tank (within the containment)

   N/A
   Horizontal Tank

5. Available Diked Volume = (total diked volume) – (total volume of tanks)

   = 17910.41 gallons

6. Percent of Tank Containment Volume = (available diked volume) / (volume of tank)

   17910.41/10,000 = 1.79 x 100 = 179%

Therefore, containment area will hold 179% of tank.

CONTAINMENT VOLUME CALCULATIONS

CONTAINMENT B

1. Volume of Tank 2-12,000, 1-1,000 gallon Diesel tanks
   2 - 8' diameter x 32' length, 1 – 45" diameter x 12' length

2. Dimensions of Dike = 42' 1 ½" x 32' x 4'

3. Total Diked Volume = L x W x H = 5392 cu.ft.

   $$= 5392 \text{ cu.ft.} \left(\frac{7.48 \text{ gal}}{\text{cu.ft.}}\right) = 40332.16 \text{ gallons}$$

4. Total Volume of Vertical Tank (within the containment)

   N/A
   Horizontal Tank

5. Available Diked Volume = (total diked volume) – (total volume of tanks)

   = 40332.16 gallons

6. Percent of Tank Containment Volume = (available diked volume) / (volume of tank)

   40332.16 gallons/12000 gallons = 3.36 x 100 = 336%

Therefore, containment area will hold 336 % of single largest tank.

CONTAINMENT VOLUME CALCULATIONS

CONTAINMENT C

1. Volume of Tank 10,000 gallon Diesel tank
   8' diameter x 32' length

2. Dimensions of Dike = 39' 3" x 16' x 4'

3. Total Diked Volume = L x W x H = 2512 cu.ft.

   $= 2512 \text{ cu.ft.} \left(\frac{7.48 \text{ gal}}{\text{cu.ft.}}\right) = 18789.76 \text{ gallons}$

4. Total Volume of Vertical Tank (within the containment)

   N/A
   Horizontal Tank

5. Available Diked Volume = (total diked volume) – (total volume of tanks)

   = 18789.76 gallons

6. Percent of Tank Containment Volume = (available diked volume) / (volume of tank)

   18789.76 gallons/10000 gallons = 1.88 x 100 = 188%

Therefore, containment area will hold 188 % of tank.

CONTAINMENT VOLUME CALCULATIONS

CONTAINMENT D

1. Volume of Tank 2-30,000 gallon Split tank Asphalt oil
   1-30,000 gallon Asphalt oil AC-20

   11' diameter x 40' length

2. Dimensions of Dike = 53' 8" x 45' 8" x 2'

3. Total Diked Volume = L x W x H = 4901.56 cu.ft.

   $$= 4901.56 \text{ cu.ft.} \left(\frac{7.48 \text{ gal}}{\text{cu.ft.}}\right) = 36663.67 \text{ gallons}$$

4. Total Volume of Vertical Tank (within the containment)

   N/A
   Horizontal Tank

5. Available Diked Volume = (total diked volume) – (total volume of tanks)

   = 36663.67 gallons

6. Percent of Tank Containment Volume = (available diked volume) / (volume of tank)

   36663.67 gallons/30000gallons = 1.22 x 100 = 122%

Therefore, containment area will hold ____122___ % of single largest tank.

CONTAINMENT VOLUME CALCULATIONS

CONTAINMENT E

1. Volume of Tank 5876 gallon Vertical RR Diesel Tank
   10' diameter x 10' length

2. Dimensions of Dike = 18' x 18' x 3' 6"

3. Total Diked Volume = L x W x H = 1134 cu.ft.

   $$= 1134 \text{ cu.ft.} \left(\frac{7.48 \text{ gal}}{\text{cu.ft.}}\right) = 8482.32 \text{ gallons}$$

4. Total Volume of Vertical Tank (within the containment)

   N/A
   See note at bottom

5. Available Diked Volume = (total diked volume) – (total volume of tanks)

   = 8482.32 gallons

6. Percent of Tank Containment Volume = (available diked volume) / (volume of tank)

   8482.32 gallons/ 5876 gallons = 1.44 x 100 = 144%

Therefore, containment area will hold 144 % of single largest tank.

In this calculation the total area of vertical tank (within the containment) is zero because the tank is elevated by beams. Therefore the tank does not significantly impinge on available containment volume.

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Hanson Aggregates West, Inc.
FACILITY ADDRESS: New Braunfels, TX
Nacogdoches Rd. and FM 2252

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
Yes_____ No ✓

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
Yes_____ No ✓

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
Yes_____ No ✓

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake[2]?
Yes_____ No ✓

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes_____ No ✓

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information. I believe that the submitted information is true, accurate, and complete.

Clyde Ding
Name(please type or print)

Clyde Ding
Signature

Vice President
Title

Aug 9 1999
Date

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2©.

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HANSON AGGREGATES
SOUTH CENTRAL REGION DALLAS, TEXAS

Hanson

TITLE	SPCC PLOT PLAN SERVTEX PLANT
LOCATION	NEW BRAUNFELS, TX
COUNTY	COMAL
DATE	JUNE 2, 2000
SCALE	1"=1000'
DRAWING NO.	
REVISION	

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

Factors that affect surface water and groundwater quality would be any soil disturbing activities. However, because the groundwater in the area is located at a depth of approximately 150 feet below surface grade, groundwater impacts are not anticipated.

Surface water could be impacted by storm water runoff from the disturbed areas of the project site. Potential sources of contamination include:

- Clearing and grubbing;
- Removal of top soils; and
- Blasting Preparations

The mining area will be located to the west side of the primary crushing plant and all storm water will be contained within the quarry. Mobile equipment is the main pollutant source inside the quarry therefore documented inspections before the shift and awareness of leaking equipment during the shift are the major provisions to minimize storm water pollutions inside the mining area.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

Sequence of major activities which will disturb soils include:

- Clearing and grubbing;
- Removal of top soils;
- Blasting; and
- Quarrying of limestone and removing to crusher.

The estimated total area of the site to be disturbed by each of these activities is around 110 acres.

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Temporary storm water and spill controls actually consist of the permanent controls which include:

- A diversion channel on the southwest side of the property to minimize the amount of water entering the WPAP site;
- A diversion berm adhacent to the mine face and disturbed area to prevent water from leaving the disturbed area;
- Maintenance of vegetation (existing trees, brushes, and grasses) in discharge areas for erosion control;
- Supporting vegetation in ditches and on berms;
- Maintenance of a storm water retention berm on the south of the property;
- Review of storm water controls on a scheduled basis with record retention of the inspections;
- Availability of spill equipment and trained personnel in the event of a spill
- Training all employees of the SWPPP
- Routine inspections and re-working of drainage areas if needed.

A proposed diversion channel on the south west side of the property will be constructed to divert the upgradient surface water from flowing over the disturbed areas or the mining operation prior to entering the quarry. It will start from the mine limit (elevation around 890 feet) and will be constructed with 1.5% slope, consistent with the existing topography of the site as shown on Figure 2.

ATTACHMENT F

STRUCTURAL PRACTICES

DIVERSION CHANNEL

A proposed diversion channel on the south west side of the property will be constructed to divert the upgradient surface water from flowing over the disturbed areas or the mining operation prior to entering the quarry. The channel will start from the mine limit (elevation around 890 feet) and will be constructed with 1.5% slope, consistent with the existing topography of the site as shown on Figure 2.

DIVERSION BERM

The disturbed area storm water runoff will be prevented from leaving the area by constructing a diversion berm adjacent to the mine face and disturbed area. On-site storm water from the disturbed area will be captured within the quarry.

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR BMP's

Inspection of sediment and erosion control structures will be performed every 14 days or after a ½ inch rain. An inspection form will be used to record the inspections and will be retained.

Major observations to be made during the inspection include:

- The diversion berm, and drainage channel will be inspected;
- Outlet structures will be inspected after heavy rains to see if erosion around or below the riprap has taken place or if stones have been dislodged. All repairs will be made immediately to prevent further damage.
- Locations where no berms utilized, because there is no topographic relief at those portions of the site, will be visually inspected to determine if pollutants are discharging from these areas. If it appears that pollutants have been discharged or there is the potential for pollutants to be discharged from such areas, then control devices will be installed;
- The property is generally covered with vegetation. All drainage will be in vegetated channels. Any area experiencing significant erosion will be seeded, sodded, or protected with rock riprap.
- Locations where vehicles enter or exit will be inspected for adverse impacts and any material releases from trucking operations.

Based on the results of the inspection, storm water control measures will be repaired, as necessary.

ATTACHMENT J

SCHEDULE OF INTERIM AND

PERMANENT SOIL STABILIZATION PRACTICES

Existing vegetation will be preserved to the extent possible. Once mining activities permanently ceases within a portion of the site, stabilization measures will be initiated within 14 days.

Hanson

Hanson Aggregates West, Inc.
P.O. BOX 190999 DALLAS, TEXAS 75219-0999
Hanson Aggregates West, Inc.

62-4
311

078
000787
15920

PAY
FIVE THOUSAND AND 00/100 **********

DATE	CHECK AMOUNT
04/04/02	$*****5,000.00

TO THE ORDER OF
TEX NATURAL RESOURCE CONSERV COMMISSION
PO BOX 13088
AUSTIN TX 78711-3087

Hanson Aggregates West, Inc.
CHECKS IN EXCESS OF $20,000.00 REQUIRE COUNTERSIGNATURE

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

Mellon Bank, N.A., Philadelphia, PA (0310)
Payable through Mellon Bank (DE) N.A., Wilmington, DE

⑈078713⑈ ⑆031100047⑆ 2⑈958 353⑈

APR 1 2 2002

004-HAWT (a/p rev. 10/99) han•170.f3f

Hanson

Hanson Aggregates West, Inc.
P.O. BOX 190999 DALLAS, TEXAS 75219-0999
Hanson Aggregates West, Inc.

DATE	CHECK NO.
04/04/02	00078713
159206	00710

DATE	INVOICE/CREDIT MEMO	GROSS	DISCOUNT	NET
04/04/02	WATERPOLLUTIONABATEMT0402 SERV	5,000.00		5,000.00
	TOTAL	5,000.00		5,000.00

THE ATTACHED CHECK IS IN PAYMENT FOR ITEMS DESCRIBED ABOVE

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

November 10, 2000

Mr. Clyde Ding, P.E.
Hanson Aggregates West, Inc.
P O Box 190999
Dallas, TX 75219-0999

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: Hanson Aggregates West - Servtex Facility; Located at 21303 FM 2252; Garden Ridge, Texas
TYPE OF PLAN: Request for Exception; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 1587.00

Dear Mr. Ding:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the request for exception for the referenced project that Lesley Pedde, P.E. of Cook-Joyce, Inc. submitted to the San Antonio Regional Office on behalf of Hanson Aggregates West, Inc. on October 16, 2000. The request for exception proposed in the submittal is in general compliance with 30 TAC § 213.9; therefore, approval of the plan is hereby granted subject to applicable state rules and the conditions in this approval letter. *This approval expires two (2) years from the date of this approval unless, prior to the expiration date, construction has commenced on the project or an extension of time has been requested.*

Under 30 TAC §213.9(a),

> Exceptions to any substantive provision of this chapter related to the protection of water quality may be granted by the executive director **if the requestor can demonstrate equivalent water quality protection for the Edwards Aquifer.** Requests for exceptions will be reviewed by the executive director on a case-by-case basis. Prior approval under this section must be obtained for the exception to be authorized.

PROJECT DESCRIPTION

As presented, this 2,000 acre quarry site has been in operation since the late 1930's. The proposed project is to enhance the efficiency of water recycling at the quarry. Incoming process wastewater, mine sweep groundwater, and stormwater from the active quarry will be mixed with an anionic or nonionic flocculating product and a small amount of cationic product to increase floc production. Flocculation will occur in a clay-lined treatment pond. A floating dredge will transfer the floc slurry to a particle bonding machine (PBM) where a cationic reagent and anionic reagent will be added to further consolidate the floc. Following the addition of the reagents, the floc mass will pass through a series of rollers in the PBM to facilitate liquid removal. Expelled liquid will be returned to the settling pond. The dried solids will be placed in an adjacent mined out area. The untreated fines previously disposed of in that area will function as a liner.

Some minor construction will occur for this project, and an exception to the requirement of submitting a water pollution abatement plan (WPAP) was requested. All construction will occur within the existing quarry. A prefabricated steel building and associated concrete pad will be constructed to house the particle bonding machines and associated chemicals. The chemicals will be stored within containment inside the building.

During construction, upgradient diversion berms and downgradient silt fences and/or berms will be installed at the building construction area prior to the initiation of construction activities, and be maintained during construction. After construction, entrances to the particle bonding building will be curbed such that the building will function as a containment area. Chemical solutions will be mixed and stored within a curbed area. In the event of a spill, this mixing area will be provided with a drain to direct the treatment chemicals to a drain system and then to the treatment/dredge pond.

EXCEPTION JUSTIFICATION

During construction, upgradient diversion berms and downgradient silt fences and/or berms will be installed at the building construction area prior to the initiation of construction activities, and be maintained during construction. After construction, entrances to the particle bonding building will be curbed such that the building will function as a containment area. Chemical solutions will be mixed and stored within a curbed area. In the event of a spill, this mixing area will be provided with a drain to direct the treatment chemicals to a drain system and then to the treatment/dredge pond.

SPECIAL CONDITIONS FOR EXCEPTION

I. The proposed flocculent must be used in accordance with the manufacturer's instructions.

II. Any spillage of the flocculent must be reported to the TNRCC.

III. The request for exception is granted.

STANDARD CONDITIONS FOR EXCEPTION

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries, covered by the Edwards Aquifer protection plan, shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.

3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.

4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and file number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension of an approved plan.

During Construction:

6. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

7. If any sensitive feature is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

8. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

9. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

<u>After Completion of Construction:</u>

11. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

12. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

13. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact John Mauser of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource Conservation Commission

JAS/JKM/eg

Enclosure: Deed Recordation Affidavit, Form TNRCC-0625
Change in Responsibility for Maintenance or Permanent BMPs-Form TNRCC-10263

cc: Ms. Lesley S. Pedde, Cook-Joyce, Inc.
Mr. Jay Feibelman, City of Garden Ridge
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations, Austin

FORSTER ENGINEERING

19915 Wittenburg
San Antonio, Texas 78256
p (210) 698-5544 c (210) 771-5721
fforster@forsterengineering.com
www.forsterengineering.com

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MAY 16 2017

COUNTY ENGINEER

Hand Delivered
MAY 11 2017
TCEQ Reg 13

May 8, 2017

Mr. Todd Jones
Texas Commission on Environmental Quality (TCEQ)
San Antonio Region 13
14250 Judson Road
San Antonio, Texas 78233

Subject: Hanson Aggregates LLC
Servtex Quarry, Worley/Heitkamp Tracts
Water Pollution Prevention Plan (WPAP) Extension Application
Investigation No. 1288798, RN 102541612

Dear Mr. Jones:

Hanson Aggregates is submitting this WPAP Extension Application for the Servtex Quarry, Worley/Heitkamp Tracts to comply with the Edwards Aquifer Program Regulations under Texas Administrative Code (30 TAC §213). The original WPAP was approved on May 16, 2013 and expired on May 16, 2015. Four six-month extensions were approved extending the expiration to November 16, 2015, May 16, 2016, November 16, 2016, and May 16, 2017.

Please find attached one (1) original and five (5) copies of the Hanson Aggregates LLC Servtex Quarry, Worley/Heitkamp Tracts, WPAP Extension Application. This WPAP Application has been prepared in accordance with Texas Administrative Code (30 TAC §213) for development over the Edwards Aquifer Recharge Zone.

We are requesting your review and approval of this WPAP application. The required review fee of $150 is included herewith. If you have any questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Forster Engineering
(TBPE # F-12385)

Charles P. "Frosty" Forster, P.E., P.G.
Principal

STATE OF TEXAS
CHARLES P. FORSTER
59043
REGISTERED
PROFESSIONAL ENGINEER
05/08/17

1066G-17

Edwards Aquifer Protection Plan Extension Request

X **Edwards Aquifer Application Cover Page (TCEQ-20705)**

X **Extension Request for an Edwards Aquifer Protection Plan (TCEQ-10260)**

Attachment A - Approval Letter or Extension Approval

X **Agent Authorization Form (TCEQ-0599), if application submitted by agent**

X **Application Fee Form (TCEQ-0574)**

X **Check Payable to the "Texas Commission on Environmental Quality"**

X **Core Data Form (TCEQ-10400)**

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Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

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Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the effected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS						**2. Regulated Entity No.:** 102541612			RECEIVED	
3. Customer Name: Hanson Aggregates LLC						**4. Customer No.:** 603475864			MAY 16 2017	
5. Project Type: (Please circle/check one)	New		Modification			Extension		Exception	COUNTY ENGINEE	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	*Optional Enhanced Measures*	
7. Land Use: (Please circle/check one)	Residential		Non-residential					**8. Site (acres):**	131.5	
9. Application Fee:	$150.00		**10. Permanent BMP(s):**					Earthen Berms		
11. SCS (Linear Ft.):	0		**12. AST/UST (No. Tanks):**					0		
13. County:	Comal		**14. Watershed:**					Dry Comal Creek		

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

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San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	__	1	__	__	__
Region (1 req.)	__	1	__	__	__
County(ies)	__	1	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	1 Edwards Aquifer Authority 1 COMAL TRINITY GCD	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch 1 Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Charles P. "Frosty" Forster, P.E., P.G. Print Name of Customer/Authorized Agent
Charles P. Forster 05/08/17 Signature of Customer/Authorized Agent — Date

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

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MAY 16 2017

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Extension Request for an Edwards Aquifer Protection Plan

Texas Commission on Environmental Quality

Relating to 30 TAC §213.4(g) Effective June 1, 1999

Regulated Entity Information

If requested by an agent, attach the agent authorization form.

1. Regulated Entity Name: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS
2. Customer (Applicant):

   Contact Person: Lalit Bhatnagar, P.E.
   Entity: Hanson Aggregates LLC
   Mailing Address: 300 E. John Carpenter Freeway, Suite 1645
   City, State: Irving, TX Zip: 75062
   Telephone: 972-814-4122 Fax: 469-417-1438
   Email Address: Lalit.Bhatnagar@hanson.biz

3. Agent/Representative (if any):

   Contact Person: Charles P. "Frosty" Forster, P.E., P.G.
   Entity: Forster Engineering
   Mailing Address: 19915 Wittenburg
   City, State: San Antonio, TX Zip: 78256
   Telephone: 210-698-5544 Fax: _____
   Email Address: fforster@forsterengineering.com

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Extension Request

4. ☒ **Attachment A - Approval Letter or Extension Approval**. A copy of the last approval letter or the last approved extension is attached.

   Date of letter: 12/09/16
   Expiration date: 05/16/17

5. ☒ This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.
6. ☒ A completed fee form is attached. The fee for a six-month extension of time is $150.

Signature

Print Name of Customer/Agent: Charles P. "Frosty" Forster, P.E., P.G.

Date: 05/08/17

Signature of ~~Customer~~/Agent:

STATE OF TEXAS
CHARLES P. FORSTER
59043
REGISTERED
PROFESSIONAL ENGINEER

05/08/17

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 9, 2016

Mr. William H. Venema
Hanson Aggregates, LLC
300 E. John Carpenter Freeway, Suite 1645
Irving, Texas 75062

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Servtex Quarry, Worley/Heitkamp Tracts; Located on the northeast corner of the intersection of FM 2252 and Schneider Lane; Garden Ridge, Texas.

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity Number: RN102541612; Additional ID No. 13-15050702

Dear Mr. Venema:

On November 8, 2016, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced Water Pollution Abatement Plan (WPAP) approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	May 16, 2013
Date of Expiration:	May 16, 2015
Date Extension Request Received	Date of Extension Expiration
May 7, 2015	November 16, 2015
October 28, 2015	May 16, 2016
May 12, 2016	November 16, 2016
November 8, 2016	May 16, 2017

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes

or modifications to the originally approved plan. This request for extension expires on May 16, 2017. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G. of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4074.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region
Texas Commission on Environmental Quality

LB/DPM/eg

cc: Mr. Charles P. Forster, P.E., P.G., Forster Engineering
The Honorable Nadine L. Knaus, City of Garden Ridge
Mr. Thomas H. Hornseth, P.E., Comal County Engineer
Mr. Roland Ruiz, Edwards Aquifer Authority
Mr. H. L. Saur, Comal Trinity GCD
TCEQ Central Records, Building F, MC 212

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I Carol Lowry,
Print Name

Vice President,
Title - Owner/President/Other

of Hanson Aggregates LLC,
Corporation/Partnership/Entity Name

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have authorized Charles P. "Frosty" Forster, P.E., P.G.
Print Name of Agent/Engineer

of Forster Engineering
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Carol L. Lowry
Applicant's Signature

5/4/2017
Date

Carol Lowry
Vice President
Hanson Aggregates LLC

THE STATE OF Texas §

County of Dallas §

Carol Lowry, Vice President
of Hanson Aggregates LLC

BEFORE ME, the undersigned authority, on this day personally appeared _____known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 4th day of May, 2017.

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NOTARY PUBLIC

AMY C YI
My Commission Expires
November 12, 2018

Amy C. Yi
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: November 12, 2018

Lehigh Hanson
HEIDELBERGCEMENT Group

Lehigh Hanson, Inc.

Carol L. Lowry
Vice President and General Counsel
300 E. John Carpenter Freeway
Suite 1645
Irving, Texas 75062
Direct: (972) 653-3895
Fax (972) 819-1735

May 4, 2017

Mr. Alex D. Grant
Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
TCEQ – San Antonio Region
14250 Judson Road
San Antonio, TX 78233

Subject: **Hanson Aggregates West, Inc., Comal County Properties**
Hanson Aggregates LLC TCEQ Applications

Dear Mr. Grant:

I, Carol Lowry, am a duly designated officer, Vice President of Hanson Aggregates LLC, formerly known as Hanson Aggregates West, Inc. On December 31, 2008, Hanson Aggregates West, Inc. converted and changed its name to Hanson Aggregates West LLC. Also, on December 31, 2008, Hanson Aggregates West LLC changed its name to Hanson Aggregates LLC.

Therefore, Hanson Aggregates LLC, formerly Hanson Aggregates West, Inc., has full possession and control of the various properties identified or recorded in the Comal County records as owned by Hanson Aggregates West, Inc. by virtue of ownership. Accordingly, Hanson Aggregates LLC has the authority, as owner, to apply for any and all permits required by the Texas Commission on Environmental Quality (TCEQ) for said properties.

If you have any questions or concerns, please contact me.

Regards,

Carol Lowry
Vice President
Hanson Aggregates LLC

STATE OF TEXAS
COUNTY OF DALLAS

I, Amy C. Yi, a Notary Public, do hereby certify that Carol Lowry as Vice President of Hanson Aggregates LLC, personally appeared before me this day, known to me to be the person whose name is subscribed on the foregoing instrument and acknowledged to me that she executed the same for the purposes and consideration therein expressed.

WITNESS my hand and official seal this 4th day of May, 2017.

_____ Notary Public

My Commission expires: _____

[SEAL]

AMY C YI
My Commission Expires
November 12, 2018

Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF CONVERSION OF A DELAWARE CORPORATION UNDER THE NAME OF "HANSON AGGREGATES WEST, INC." TO A DELAWARE LIMITED LIABILITY COMPANY, CHANGING ITS NAME FROM "HANSON AGGREGATES WEST, INC." TO "HANSON AGGREGATES WEST LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:52 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF CONVERSION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100V

081235422

AUTHENTICATION: 7057716

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:52 PM 12/29/2008
SRV 081235422 - 0693918 FILE

STATE OF DELAWARE
CERTIFICATE OF CONVERSION
FROM A CORPORATION TO A
LIMITED LIABILITY COMPANY PURSUANT TO
SECTION 18-214 OF THE LIMITED LIABILITY COMPANY ACT

Hanson Aggregates West, Inc., a corporation formed and existing under the General Corporation Law of the State of Delaware (the "***Corporation***"), for purposes of converting the Corporation into a limited liability company existing under the Limited Liability Company Act of the State of Delaware (the "***Limited Liability Company***"), hereby certifies as follows:

1. The jurisdiction where the Corporation was first formed is Delaware.

2. The jurisdiction of the Corporation immediately prior to filing this Certificate is Delaware.

3. The date the Corporation was first formed is November 27, 1968.

4. The name of the Corporation immediately prior to filing this Certificate is Hanson Aggregates West, Inc.

5. The name of the Limited Liability Company as set forth in the Certificate of Formation is Hanson Aggregates West LLC.

6. The conversion is to be effective as of 9:45 p.m., Eastern Time, on December 31, 2008.

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of the 15th day of December, A.D., 2008.

HANSON AGGREGATES WEST, INC.

By: _____
Authorized Person

Name: Michael H. Hyer

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Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND CORRECT COPY OF CERTIFICATE OF FORMATION OF "HANSON AGGREGATES WEST LLC" FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:52 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF FORMATION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100V

081235422

AUTHENTICATION: 7057716

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:52 PM 12/29/2008
SRV 081235422 - 0693918 FILE

STATE OF DELAWARE
LIMITED LIABILITY COMPANY
CERTIFICATE OF FORMATION

This Certificate of Formation of Hanson Aggregates West LLC is being duly executed and filed by the undersigned, as an authorized person, to form a limited liability company under the Delaware Limited Liability Company Act (6 Del. C. §18-101 et seq.).

First: The name of the limited liability company formed hereby is Hanson Aggregates West LLC (the "***Company***").

Second: The address of the Company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

Third: The name and address of the registered agent for service of process on the Company in the State of Delaware is The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

Fourth: The Company is being formed in conjunction with the conversion of Hanson Aggregates West, Inc., a Delaware corporation (the "***Converting Entity***"), to a limited liability company.

Fifth: The conversion of the Converting Entity and formation of the limited liability company will be effective as of 9:45 p.m. on December 31, 2008 (the "***Effective Time***").

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation as of the 15th day of December, 2008, to be effective as of the Effective Time.

By: _____
Authorized Person

Name: Michael H. Hyer

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Delaware

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "HANSON AGGREGATES WEST LLC", CHANGING ITS NAME FROM "HANSON AGGREGATES WEST LLC" TO "HANSON AGGREGATES LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF DECEMBER, A.D. 2008, AT 6:44 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2008, AT 9:45 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0693918 8100

081235465

AUTHENTICATION: 7059294

DATE: 01-02-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:44 PM 12/29/2008
FILED 06:44 PM 12/29/2008
SRV 081235465 - 0693918 FILE

STATE OF DELAWARE
CERTIFICATE OF AMENDMENT

1. Name of Limited Liability Company: Hanson Aggregates West LLC.

2. The Certificate of Formation of the limited liability company is hereby amended as follows:

> The First Article of the Certificate of Formation is deleted in its entirety and the following provision is substituted in its place and stead:
>
> **First:** The name of the limited liability company is Hanson Aggregates LLC (the "***Company***").

3. This Amendment shall be effective at 9:45 p.m., Eastern Time, on December 31, 2008.

IN WITNESS WHEREOF, the undersigned has executed this Certificate on behalf of the limited liability company as of the 29th day of December, A.D. 2008.

By: _____
Authorized Person

Name: Michael H. Hyer
Print or Type

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Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: SERVTEX QUARRY, WORLEY/HEITKAMP TRACTS

Regulated Entity Location: 21303 FM 2252, GARDEN RIDGE, TX 78132

Name of Customer: Hanson Aggregates LLC

Contact Person: Lalit Bhatnagar, P.E. Phone: 972-814-4122

Customer Reference Number (if issued):CN 603475864

Regulated Entity Reference Number (if issued):RN 102541612

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde

☒ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☐ Austin Regional Office

☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office

☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	1 Each	$ 150

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Signature: Charles P. Forster Date: 05/08/17

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)

☐ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)

☒ Renewal (Core Data Form should be submitted with the renewal form) ☐ Other

2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 603475864		RN 102541612

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)
☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)	

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John)	If new Customer, enter previous Customer below:

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)

11. Type of Customer:	☐ Corporation	☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other		☐ Sole Proprietorship	☐ Other:

12. Number of Employees	13. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ Yes ☐ No

14. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check one of the following:

☐ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:							
	City		State		ZIP		ZIP + 4	

16. Country Mailing Information (if outside USA)	17. E-Mail Address (if applicable)

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18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
( ) -		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If `New Regulated Entity" is selected below this form should be accompanied by a permit application)

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4	
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:			
26. Nearest City		State	Nearest ZIP Code

27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

34. Mailing Address:							
	City		State		ZIP		ZIP + 4	
35. E-Mail Address:							

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
( ) -		( ) -

39. **TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

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SECTION IV: Preparer Information

40. Name: Charles P. "Frosty" Forster, P.E., P.G.		41. Title: Principal	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 698-5544		( ) -	fforster@forsterengineering.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	FORSTER ENGINEERING	Job Title:	PRINCIPAL
Name(*In Print*):	Charles P. Forster, P.E.,P.G.	Phone:	( )-210-698-5544
Signature:	Charles P. Forster	Date:	05/08/17