THE

AQUIFER PROTECTION PLAN

PROJECT NAME: _____

APPLICANT: _____

DATE: _____

Revised: April, 2007

AQUIFER PROTECTION PLAN

For Activities Which Require Pollution Prevention Practices on the Edwards Aquifer Recharge Zone/Drainage/Contributing Zone Area.

No development shall be undertaken on any land, tract, parcel, or lot which is within the boundaries of the Edwards Aquifer Recharge Zone and which is also subject to regulation by Chapter 34 of the City Code ArticleVI, Division 6 unless and until an Aquifer Protection Plan is issued by the Resource Protection and Compliance Department of the San Antonio Water System to the owner, developer of such property or their authorized agent.

GENERAL INFORMATION

PROJECT NAME: _____

ACREAGE: _____

Do Not Write in this box **For SAWS use only** **Updated April, 2007**	
Received by SAWS (Day 1)	
Inspection Date:	
Judged Administratively ____ Complete..... ____ Incomplete.....	DATE _____ _____
Water Pollution Abatement Plan ____ Submitted ..... ____ Approved	DATE _____ _____
Has a Variance been requested?	____ Yes ____ No
_____ Approved _____ Incomplete and Returned _____ Disapproved	

T H E AQUIFER PROTECTION P L A N

The following information must be provided to the Resource Protection & Compliance Department. All questions must be completed on the application and all information provided on the Aquifer Protection Plan. **Category 1 properties are not required to fill out the Aquifer Protection Plan (formerly known as the Site Development Plan/Letter of Certification).**

APPLICATION:

SOURCE: Page six (6) of the Aquifer Protection Ordinance No. 81491

Aquifer Protection Plan (s)

The following information must be included in the Aquifer Protection Plan (s). Please check "SB" for Submitted or "NA" for Not Applicable. Failure to comply with these requirements constitutes cause for rejection of the plan (s).

	SB	NA	(SB=Submitted NA=Not Applicable)
1.	____	____	The date, written scale and bar scale, north arrow, and key site plan showing the location of the tract on which the development is to take place.
2.	____	____	The existing boundary lines and acreage of the tract on which the development is to take place, and the common boundary lines and names of the owners of adjacent properties.
3.	____	____	Identification of all existing and/or proposed Floodplain Preservation Areas, floodplain buffer zones, highly significant recharge features and buffer zones, and all such other areas with restrictions as required by this article.
4.	____	____	A detailed erosion/sedimentation control plan and construction sequencing plan required by Section 34-975 of the Aquifer Protection Ordinance # 81491.
5.	____	____	A detailed drainage plan and street layout that comply with the requirements of this division (Aquifer Protection Ordinance # 81491).
6.	____	____	Engineering drawings showing compliance with the applicable requirements of this division (Aquifer Protection Ordinance # 81491) for control strategies on development.
7.	____	____	A report, site plan, and/or other relevant information addressing the Best Management Practices as required by sections 34-965 through 34-975 (Aquifer Protection Ordinance # 81491).

	SB	NA	
8.	____	____	A topographic map, drawn to a scale of one hundred (100) feet to one inch, or at a scale appropriate for the size of the development. The map should display, according to the best information available, topographic and geologic information and features (including, but not limited to, faults and fractures along waterways, and sinkholes), and proposed and existing floodplain preservation areas. Details of buffering for features and floodplains when applicable.
9.	____	____	The location, type of use, and total percentage of proposed and existing impervious cover on the site, in conformance with this Division. Impervious cover shall include asphalt and concrete surfaces, sidewalks, rooftops, swimming pools and other surfaces which do not allow percolation into the subsurface.
10.	____	____	Location of all temporary and permanent runoff detention basins, constructed and altered waterways and other physical facilities to be installed to comply with the terms of this division.
11.	____	____	An affidavit from the appropriate affiant showing acceptance of legal and financial responsibility for structural controls, maintenance cost, monitoring, and remediation.
12.	____	____	Final plans for underground utility installation shall be submitted with the Aquifer Protection Plan and shall show maximum construction corridor widths.
13.	____	____	Location of all monitoring stations, sample points or other significant devices used to obtain, measure, or assure water quality.
14.	____	____	Any baseline water quality data from surface water samples required to be taken or maintained under regulations established by the San Antonio Water System.
15.	____	____	A maintenance plan which provides the proposed schedule and details of maintenance which will be performed to ensure the proper operation and effectiveness of all control structures.
16.	____	____	Special notes or attachments as may be required by other Sections of this Division.
17.	____	____	Has the site plan (s) been sealed by a registered professional engineer?

San Antonio Water System
Aquifer Protection Plan

COMPLETELY FILL OUT THE FOLLOWING INFORMATION

1. Person making inquiry:

Contact Person: _____
Entity: _____
Mailing Address: _____
City, State: _____
Zip Code: _____
Telephone: _____
Fax: _____

2. Agent (If any):

Contact Person: _____
Entity: _____
Mailing Address: _____
City, State: _____
Zip Code: _____
Telephone: _____
Fax: _____

3. Enter Site Address (if assigned):

Street (If assigned): _____
City, Zip: _____

(Check appropriate box)

Relationship To Recharge Zone	**GOVERNMENTAL JURISDICTION**			
	Inside San Antonio City Limits	Within City of San Antonio ETJ	In Bexar County and outside San Antonio ETJ	Acreage Subtotal
Acreage within Transition Zone				
Acreage within Recharge Zone				
Acreage within Contributing Zone Area				
TOTAL PROJECT ACREAGE				

4. The location of the project site is generally described below (Example "NE corner of Bitters & Heimer Roads", "On east side of Heimer Road, 1/4 mile north of Bitters Road").

_____

_____

_____

5. ____ A copy of the official 7 1/2 minute USGS quadrangle map (s) of the Edwards Recharge Zone is attached behind this sheet. Maps are available from:

Edwards Aquifer Authority (Edwards Underground Water District) (210) 222-2204
Ferguson Map Company (210) 829-7629.

The map (s) should clearly show:

1. Project Site.
2. USGS Quadrangle Name(s).
3. Boundaries of the Recharge Zone.

6. The locations of **all known wells** (oil, water, unplugged, capped and/or abandoned, test holes, etc.). Mark all that apply.

6A.____ There are no wells or test holes of any kind known to exist on this project site:

6B.____ #____ well(s) will be drilled and used for _____;

6C.____ #____ well(s) are **present** on the project site and their locations are labeled on the Site Plan.

(1) ____ The well(s) **have been** properly abandoned.

(2) ____ The well(s) are not in use and **will be** properly abandoned.

(3) ____ The wells are in use and comply with Chapter 34 of the San Antonio City Code, Article VI, Division 2, entitled Wells containing Sections 34-566 thru Sections 34-590. The well(s) will be used for _____ .

7. The **type of project** is:
(Check all that apply)

	# of Lots	# of Living Unit Equivalents	Projected Population
Residential			
Multi-Family			
Commercial		NA	NA
Utility		NA	NA
Recharge Structure/Dam		NA	NA
Other			

8. A narrative description of the proposed project is included below:

_____

_____

9. Buffering if applicable

____ Floodplain – Describe how the floodplain will be buffered:

_____

_____

____ Sensitive/Significant Features (**"sensitivity of ≥40 and a catchment area of ≥1.6 acres-from Geological Assessment")** – Describe how the feature/s will be buffered:

_____

_____

10. Impervious cover of Project

____ Impervious cover of portion of project within the Edwards Aquiver Recharge Zone
_____ Percentage _____ Acreage

____ Impervious cover of portion of project within the Contributing Zone
_____ Percentage _____ Acreage

11. Source of Potable Water.

____ San Antonio Water System
____ Water Purveyor: _____
____ Other: _____
____ Private on-site water well (s). Source of water (formation)(if known)_____
____ No potable water will be needed for this project.

12. Source of Non-Potable water.

____ Non Applicable
____ Private on-site water well (s). Source of water (formation)(if known) _____
____ Other: _____

13. The existing conditions on the project site are noted below.
The project site is:
____ Existing commercial site
____ Existing industrial site
____ Existing residential site
____ Existing paved and/or unpaved roads
____ Undeveloped (Clear)
____ Undeveloped (with woods and meadows)
____ Partially Developed.
____ Other _____

14. Municipal Solid waste, and/or hazardous waste:

____ There are areas of trash, debris or other municipal solid waste or hazardous waste on this property which will be disposed of properly at an authorized landfill prior to commencing construction.

____ There are no areas of trash, debris or other municipal solid waste or hazardous waste existing on this property.

____ Other comments describe below:

_____

_____

15. Wastewater to be generated by proposed project.

Wastewater to be generated by proposed project:	
Character	Volume
____ % Domestic ____ % Industrial ____ % Commingled	_____ gallons/day _____ gallons/day _____ gallons/day
TOTAL	_____ gallons/day

16. The Method of Wastewater Disposal is:

_____

_____

16A. ____ On-Site Sewage Treatment (Septic Tank):

On-site septic tanks will be used to treat and dispose of wastewater. **The appropriate licensing authority's letter is attached directly behind this page**. It states that the land is suitable for the use of a septic tank or identifies areas that are not suitable.

Furthermore, I am aware that the minimum lot size in Bexar County for an on-site sewage treatment facility on the Recharge Zone is one (1) acre. Each lot in this project / development is at least one (1) acre in size and the on-site treatment facility will be designed and installed by a Texas licensed sanitarian or engineer. A copy of the letter from the County or City approving the use of on-site sewage treatment designed in accordance with County and City requirements is attached.

_____ _____
Signature Date

16B. ____ On-Site Sewage Collection System (Sewer Lines):

An organized **public or private** (circle one) sewage collection system (SCS) will convey wastewater from this project off of the Recharge Zone for treatment and disposal at the EXISTING / PROPOSED (circle one) _____ Sewage Treatment Plant (S.T.P.).

16C. ____ For sewer lines, all private service laterals will be inspected by:

Entity Name: _____
Address: _____
City, State, Zip: _____
Telephone: _____
Fax: _____

AFFIDAVIT

STATE OF TEXAS §
COUNTY OF BEXAR §

ON THIS DAY CAME BEFORE ME THE UNDERSIGNED INDIVIDUAL ACTING IN THE CAPACITY STATED HEREIN, AND BEFORE ME, AFTER FIRST BEING DULY SWORN, DID ATTEST AND AFFIRM TO THE FOLLOWING STATEMENTS AND UNDERTOOK THE FOLLOWING OBLIGATIONS TO-WIT:

"I, _____, the undersigned, in my capacity as _____ of _____, in compliance with Chapter 34, Section 34-911 of the City Code of the City of San Antonio, and acting thereunder as an "affiant" as that term is defined in Section 34-908 of the Code, have made and executed this document on behalf of _____, in association with the filing of an application for the Aquifer Protection Plan on the ____ day of _____, 20___ with the San Antonio Water System, relating to the following development project:

_____

_____.

In the above described capacity I, the undersigned, hereby certify and affirm that, in relation to the development identified above, I assume financial and legal responsibility for the maintenance, operation, and effectiveness of structural controls, the performance of remediation (if required), and the performance of all required monitoring of surface water, as those duties are set out in Chapter 34, Article VI, Division 6 of the City Code of the City of San Antonio, Texas. I further affirm that I am over the age of 18 years, am of sound mind, am authorized to act on behalf of and to bind the individuals or entities identified above to this obligation in the capacity under which I am executing this document."

FURTHER AFFIANT SAYETH NOT.

_____
Signature

_____
Printed Name

_____
Title

_____
Address

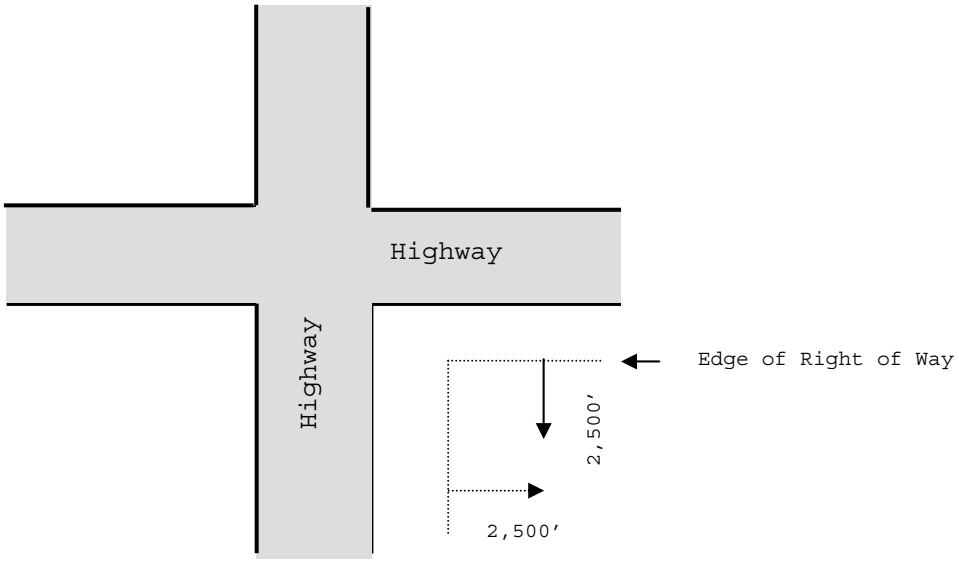
SUBSCRIBED AND SWORN TO BEFORE ME THIS ___ DAY OF _____, 20___.

_____
Notary Public

Helpful Information:

- **Watershed:** The term watershed describes an area of land that drains downslope to the lowest point. The water moves through a network of drainage pathways, both underground and on the surface. Generally, these pathways converge into streams and rivers, which become progressively larger as the water moves on downstream, eventually reaching an estuary and the ocean. Other terms used interchangeably with watershed include drainage basin or catchment basin.
- **Watershed Protection & Management Department (WPMD) changed to Source Water & Watershed Protection Department changed to Resource Protection and Compliance Department:** The department within the San Antonio Water System (SAWS) designated to apply and enforce the provisions of this Section (Aquifer Protection Ordinance No. 81491).
- **A Category 1 property is not required to fill out an Aquifer Protection Plan however, a substantial alteration to the original plans may result in a change of category status which might then require an Aquifer Protection Plan.**
- **Nodes**

EXAMPLE OF INTERSECTION NODES



Geologic Assessment Table from Texas Commission on Environmental Quality (TCEQ) Water Pollution Abatement Plan.

Identify features with a "sensitivity of ≥40 and a catchment area of ≥1.6 acres"

GEOLOGIC ASSESSMENT TABLE — **PROJECT NAME:**

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DIP	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	

* DATUM:

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

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

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 9/23/2005

STATE OF TEXAS
NAME OF GEOLOGIST
GEOLOGY
No. xxxx
LICENSED
PROFESSIONAL GEOSCIENTIST

Sheet ___1___ of ___1___

TCEQ-0585-Table (Rev. 10-01-04)