MAGNA WATER DISTRICT

WASTEWATER TREATMENT UPGRADES

ANTI-DEGRADATION REVIEW

May 2018

7090 S. UNION PARK AVENUE, SUITE 600 • SALT LAKE CITY, UTAH 84047 • P. 801.233.2500 • F. 801.233.2501

ANTIDEGRADATION REVIEW FORM
UTAH DIVISION OF WATER QUALITY

Instructions

The objective of antidegradation rules and policies is to protect existing high quality waters and set forth a process for determining where and how much degradation is allowable for socially and/or economically important reasons. In accordance with Utah Administrative Code (UAC R317-2-3), an antidegradation review (ADR) is a permit requirement for any project that will increase the level of pollutants in waters of the state. The rule outlines requirements for both Level I and Level II ADRs, as well as public comment procedures. This review form is intended to assist the applicant and Division of Water Quality (DWQ) staff in complying with the rule but is not a substitute for the complete rule in R317-2-3.5. Additional details can be found in the *Utah Antidegradation Implementation Guidance* and relevant sections of the guidance are cited in this review form.

ADRs should be among the first steps of an application for a UPDES permit because the review helps establish treatment expectations. The level of effort and amount of information required for the ADR depends on the nature of the project and the characteristics of the receiving water. To avoid unnecessary delays in permit issuance, the Division of Water Quality (DWQ) recommends that the process be initiated at least one year prior to the date a final approved permit is required.

DWQ will determine if the project will impair beneficial uses (Level I ADR) using information provided by the applicant and whether a Level II ADR is required. The applicant is responsible for conducting the Level II ADR. For the permit to be approved, the Level II ADR must document that all feasible measures have been undertaken to minimize pollution for socially, environmentally or economically beneficial projects resulting in an increase in pollution to waters of the state.

For permits requiring a Level II ADR, this antidegradation form must be completed and approved by DWQ before any UPDES permit can be issued. Typically, the ADR form is completed in an iterative manner in consultation with DWQ. The applicant should first complete the statement of social, environmental and economic importance (SEEI) in Part C and determine the parameters of concern (POC) in Part D. Once the POCs are agreed upon by DWQ, the alternatives analysis and selection of preferred alternative in Part E can be conducted based on minimizing degradation resulting from discharge of the POCs. Once the applicant and DWQ agree upon the preferred alternative, the review is considered complete, and the form must be signed, dated, and submitted to DWQ.

For additional clarification on the antidegradation review process and procedures, please contact Nicholas von Stackelberg (801-536-4374) or Jeff Ostermiller (801-536-4370).

Antidegradation Review Form

Part A: Applicant Information

Facility Name: Magna Water Reclamation Facility

Facility Owner: Steve Williams, Wastewater Operations Manager

Facility Location: 7650 West 2100 South Magna, UT 84044

Form Prepared By: Carollo Engineers, Inc.

Outfall Number: 001

Receiving Water: Lee Creek

What Are the Designated Uses of the Receiving Water (R317-2-6)?
Domestic Water Supply: None
Recreation: 2B - Secondary Contact
Aquatic Life: 3D - Waterfowl
Agricultural Water Supply: None
Great Salt Lake: None

Category of Receiving Water (R317-2-3.2, -3.3, and -3.4): Category 3

UPDES Permit Number (if applicable): UT 0021440

Effluent Flow Reviewed: 4 MGD
Typically, this should be the maximum daily discharge at the design capacity of the facility. Exceptions should be noted.

What is the application for? (check all that apply)

☒ A UPDES permit for a new facility, project, or outfall.

☒ A UPDES permit renewal with an expansion or modification of an existing wastewater treatment works.

☐ A UPDES permit renewal requiring limits for a pollutant not covered by the previous permit and/or an increase to existing permit limits.

☐ A UPDES permit renewal with no changes in facility operations.

Part B. Is a Level II ADR required?

This section of the form is intended to help applicants determine if a Level II ADR is required for specific permitted activities. In addition, the Executive Secretary may require a Level II ADR for an activity with the potential for major impact on the quality of waters of the state (R317-2-3.5a.1).

B1. The receiving water or downstream water is a Class 1C drinking water source.

☐ **Yes** A Level II ADR is required (Proceed to Part C of the Form)

☒ **No** (Proceed to Part B2 of the Form)

B2. The UPDES permit is new or is being renewed and the proposed effluent concentration and loading limits are higher than the concentration and loading limits in the previous permit and any previous antidegradation review(s).

☒ **Yes** (Proceed to Part B3 of the Form)

☐ **No** No Level II ADR is required and there is no need to proceed further with review questions.

B3. Will any pollutants use assimilative capacity of the receiving water, i.e. do the pollutant concentrations in the effluent exceed those in the receiving waters at critical conditions? For most pollutants, effluent concentrations that are higher than the ambient concentrations require an antidegradation review? For a few pollutants such as dissolved oxygen, an antidegradation review is required if the effluent concentrations are less than the ambient concentrations in the receiving water. (Section 3.3.3 of Implementation Guidance)

☒ **Yes** (Proceed to Part B4 of the Form)

☐ **No** No Level II ADR is required and there is no need to proceed further with review questions.

B4. Are water quality impacts of the proposed project temporary and limited (Section 3.3.4 of Implementation Guidance)? Proposed projects that will have temporary and limited effects on water quality can be exempted from a Level II ADR.

☐ **Yes** Identify the reasons used to justify this determination in Part B4.1 and proceed to Part G. No Level II ADR is required.

☒ **No** A Level II ADR is required (Proceed to Part C)

B4.1 Complete this question only if the applicant is requesting a Level II review exclusion for temporary and limited projects (see R317-2-3.5(b)(3) and R317-2-3.5(b)(4)). For projects requesting a temporary and limited exclusion please indicate the factor(s) used to justify this determination (check all that apply and provide details as appropriate) (Section 3.3.4 of Implementation Guidance):

☐ Water quality impacts will be temporary and related exclusively to sediment or turbidity and fish spawning will not be impaired.

Factors to be considered in determining whether water quality impacts will be temporary and limited:

a) The length of time during which water quality will be lowered:
b) The percent change in ambient concentrations of pollutants:
c) Pollutants affected:
d) Likelihood for long-term water quality benefits:
e) Potential for any residual long-term influences on existing uses:
f) Impairment of fish spawning, survival and development of aquatic fauna excluding fish removal efforts:

Additional justification, as needed:

Level II ADR

Part C, D, E, and F of the form constitute the Level II ADR Review. The applicant must provide as much detail as necessary for DWQ to perform the antidegradation review. Questions are provided for the convenience of applicants; however, for more complex permits it may be more effective to provide the required information in a separate report. Applicants that prefer a separate report should record the report name here and proceed to Part G of the form.

Optional Report Name: *2017 Magna Wastewater Facilities Plan*

Part C. Is the degradation from the project socially and economically necessary to accommodate important social or economic development in the area in which the waters are located?

The applicant must provide as much detail as necessary for DWQ to concur that the project is socially and economically necessary when answering the questions in this section. More information is available in Section 6.2 of the Implementation Guidance.

C1. Describe the social and economic benefits that would be realized through the proposed project, including the number and nature of jobs created and anticipated tax revenues.

The project will benefit the local environment, society, and economy by the following actions:

1. Economic Benefits:
    a. The treatment option is the first phase of required upgrades and is the least costly to the district and its users. The second phase is triggered by statewide nitrogen limits anticipated from DEQ in the next 10+ years.
    b. Discharging to C-7 Ditch allows the district to continue disinfecting the effluent with chlorine, which accomplishes both the required disinfection and will maintain a chlorine residual when Magna builds their wastewater reuse facilities in the next 5-10 years.
    c. The treatment upgrade allows awaiting commercial and industrial development to proceed.
    d. Outfall is upsized to accommodate future land development above the 20-year growth projections.

C2. Describe any environmental benefits to be realized through implementation of the proposed project.

1. Environmental benefits:
    a. Pollutant loading is eliminated to Kersey Creek by relocating to C-7 Ditch, a class 2B, 3E water.
    b. Wastewater effluent removed from 1.3 miles of Kersey Creek, allowing natural environment to be restored.

c. Effluent benefits from longer travel time in pipeline before compliance point for WLA at Lee Creek.

C3. Describe any social and economic losses that may result from the project, including impacts to recreation or commercial development.

The district's self-funded bond is a continuation of an existing bond levied on property value.

C4. Summarize any supporting information from the affected communities on preserving assimilative capacity to support future growth and development.

This project allows Magna Township to more effectively treat their wastewater and better protect downstream uses at a lower cost than other treatment alternatives that rely on discharge to Kersey Creek.

The transfer of the discharge to C-7 ditch changes from the effluent-dominanted Kersey Creek to a flow-diluting affect at C-7 ditch. Assimilative capacity is increased from the dilution effect of C-7 ditch. Mixing the effluent TSS with C-7 ditch will improve the overall TSS in C-7 ditch.

Future discharges as irrigation return or land drains into C-7 ditch will benefit from reduced TSS.

C5. Please describe any structures or equipment associated with the project that will be placed within or adjacent to the receiving water.

- A new proposed outfall within C-7 ditch will be constructed. It will consist of a headwall, 42-inch pipeline aligned vertically to the mean flow level of the ditch, and channel stabilization riprap. The proposed outfall will be located at 40°43'43" N, 112°04'42" W.

Part D. Identify and rank (from increasing to decreasing potential threat to designated uses) the parameters of concern. *Parameters of concern are parameters in the effluent at concentrations greater than ambient concentrations in the receiving water. The applicant is responsible for identifying parameter concentrations in the effluent and DWQ will provide parameter concentrations for the receiving water. More information is available in Section 3.3.3 of the Implementation Guidance.*

Parameters of Concern:

Rank	Pollutant	Ambient Concentration	Effluent Concentration
1	Total Suspended Solids (TSS)	537 mg/L	16 mg/L
2	Dissoloved Oxygen (DO)	8.7 mg/L	5.0 mg/L
3	CBOD5	3.5 mg/L	15 mg/L
4	Total Phosphorus (TP)	0.24 mg/L	2.5 mg/L
5	Total Nitrogen (TN)	1.7 mg/L	24.3 mg/L
6	Total Ammonia Nitrogen (TAN)	0.07 mg/L	7.0 mg/L
7	E.coli		
8	pH	8.3	7.6
9	Total Residual Chlorine (TRC)	0.00 mg/L	0.8 mg/L

Pollutants Evaluated that are not Considered Parameters of Concern:

Pollutant	Ambient Concentration	Effluent Concentration	Justification

Part E. Alternative Analysis Requirements of a Level II Antidegradation Review.

Level II ADRs require the applicant to determine whether there are feasible less-degrading alternatives to the proposed project. More information is available in Section 5.5 and 5.6 of the Implementation Guidance.

E1. The UPDES permit is being renewed without any changes to flow or concentrations. Alternative treatment and discharge options including changes to operations and maintenance were considered and compared to the current processes. No economically feasible treatment or discharge alternatives were identified that were not previously considered for any previous antidegradation review(s).

☐ **Yes** (Proceed to Part F)

☒ **No or Does Not Apply** (Proceed to E2)

E2. Attach as an appendix to this form a report that describes the following factors for all alternative treatment options (see 1) a technical description of the treatment process, including construction costs and continued operation and maintenance expenses, 2) the mass and concentration of discharge constituents, and 3) a description of the reliability of the system, including the frequency where recurring operation and maintenance may lead to temporary increases in discharged pollutants. Most of this information is typically available from a Facility Plan, if available.

Report Name: 2017 Magna Water District Wastewater Facility Plan

E3. Describe the proposed method and cost of the baseline treatment alternative. The baseline treatment alternative is the minimum treatment required to meet water quality based effluent limits (WQBEL) as determined by the preliminary or final wasteload analysis (WLA) and any secondary or categorical effluent limits.

The proposed baseline alternative includes the following major process elements

- Pipeline of effluent to C-7 Ditch
- Oxidation ditch aeration upgrade
- Secondary clarifier
- Electrical and SCADA upgrade for better process control of oxidation ditches
- Chemical Phosphorus Treatment
- Process Laboratory

The total estimated project cost of this alternative is over $15 M.

E4. Were any of the following alternatives feasible and affordable?

Alternative	Feasible	Reason Not Feasible/Affordable
Pollutant Trading	**No**	Level of effort beyond scope of project to establish and maintain pollutant trading
Water Recycling/Reuse	No	Part of long-term plan, not part of existing project
Land Application	**No**	Seasonal discharge constraints, no long-term contracts established with nearby landowners.
Connection to Other Facilities	No	Long distance to other facilities causes greater social, environmental, and economic impacts than other options.
Upgrade to Existing Facility	Yes	
Total Containment	No	Flows are too large to provide an economical effluent storage option when other more desirable measures are available
Improved O&M of Existing Systems	No	Frequency of maintenance has become a safety/personnel issue
Seasonal or Controlled Discharge	No	Flows are too large to provide an economical effluent storage option when other more desirable measures are available
New Construction	Yes	
No Discharge	No	Flows are too large to provide an economical effluent storage option when other more desirable measures are available

E5. From the applicant's perspective, what is the preferred treatment option?

Upgrade to existing facility

E6. Is the preferred option also the least polluting feasible alternative?

☐ **Yes**

☒ **No**

If no, what were less degrading feasible alternative(s)? Alternatives 2 and 3

If no, provide a summary of the justification for not selecting the least polluting feasible alternative and if appropriate, provide a more detailed justification as an attachment.

The wastewater treatment facility has sufficient capacity for the 20-year growth. The majority of the upgrades evaluated in the treatment alternatives are required due to changes in the discharge permit. Anticipating further changes to

nitrogen limits in the next 10 years requires the facility to limit large treatment process changes until permit changes are finalized.

Alternative 3 is the least degrading alternative and will be implemented once nitrogen limits are finalized. Until then, Alternative 1 was selected as the first phase while Utah DEQ establishes new statewide nitrogen limits. At that point, Alternative 3 will be revisited to bring the wastewater plant in compliance with the new limits using a revised treatment process.

Part F. Optional Information

F1. Does the applicant want to conduct optional public review(s) in addition to the mandatory public review? Level II ADRs are public noticed for a thirty day comment period. More information is available in Section 3.7.1 of the Implementation Guidance.

☒ **No**

☐ **Yes**

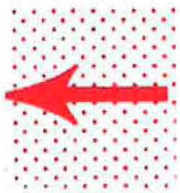
F2. Does the project include an optional mitigation plan to compensate for the proposed water quality degradation?

☒ **No**

☐ **Yes**

Report Name: ☐

Part G. Certification of Antidegradation Review



G1. Applicant Certification

The form should be signed by the same responsible person who signed the accompanying permit application or certification.

Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information in this form and associated documents is, to the best of my knowledge and belief, true, accurate, and complete.

Print Name: Terry L. Bullock

Signature: [signature]

Date: 6/4/2018

G2. DWQ Approval

To the best of my knowledge, the ADR was conducted in accordance with the rules and regulations outlined in UAC R-317-2-3.

Water Quality Management Section

Print Name: NICHOLAS VON STACKELBERG

Signature: [signature]

Date: 6/6/2018

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F Unknown

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)	X			B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: Magna Water Reclamation Facility

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*: 2 Steve Williams

B. PHONE *(area code & no.)*: (801) 250-2795

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 7650 West 210 South

B. CITY OR TOWN: 4 Magna

C. STATE: UT

D. ZIP CODE: 84044

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 7650 West 2100 South

B. COUNTY NAME: Salt Lake

C. CITY OR TOWN: 6 Magna

D. STATE: UT

E. ZIP CODE: 84044

F. COUNTY CODE *(if known)*:

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
7 *(specify)*	7 *(specify)*
C. THIRD	**D. FOURTH**
7 *(specify)*	7 *(specify)*

VIII. OPERATOR INFORMATION

A. NAME	B. Is the name listed in Item VIII-A also the owner?
8 Steve Williams	☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*		D. PHONE *(area code & no.)*
F = FEDERAL S = STATE P = PRIVATE	M = PUBLIC *(other than federal or state)* O = OTHER *(specify)*	M *(specify)*	A (801) 250-2795

E. STREET OR P.O. BOX	
7650 West 2100 South	

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
B Magna	UT	84044	Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
9 N UT0021440	9 P
B. UIC *(Underground Injection of Fluids)*	**E. OTHER** *(specify)*
9 U	9 UTL-021440 *(specify)* : Biosolids Permit No.
C. RCRA *(Hazardous Wastes)*	**E. OTHER** *(specify)*
9 R	9 UTR000000 *(specify)* : Storm Water Permit No.

XI. MAP

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

XII. NATURE OF BUSINESS *(provide a brief description)*

Treatment of domestic wastewater with surface water discharge of effluent to waters of the U.S.

XIII. CERTIFICATION *(see instructions)*

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

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Terry Pollock General Manager		

COMMENTS FOR OFFICIAL USE ONLY

C

FACILITY NAME AND PERMIT NUMBER:
Magna Water Reclamation Facility, UT0021440

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Magna Water Reclamation Facility

Mailing Address: 7650 W 2100 S
Magna, UT 84044

Contact person: Steve Williams

Title: Wastewater Operations Manager

Telephone number: (801) 250-2118

Facility Address (not P.O. Box): 7650 W 2100 S
Magna, UT 84044

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Magna Water and Sewer District

Mailing Address: 7650 W 2100 S
Magna, UT 84044

Contact person: Steve Williams

Title: Wastewater Operations Manager

Telephone number: (801) 250-2118

Is the applicant the owner or operator (or both) of the treatment works?

✔ owner ✔ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

✔ facility _____ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES: UT0021440
PSD: _____
UIC: _____
Other: UTL-021440 Biosolids Permit
RCRA: _____
Other: UTR000000 Storm Water Permit

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Magna	28,144	separate gravity sewer	Municipal
West Valley	9,328	separate gravity sewer	Municipal

Total population served 32,111

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes ✔ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes ✔ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 4.00 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	2.80	2.74	2.80	mgd
c. Maximum daily flow rate	3.60	3.70	3.62	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✔ Separate sanitary sewer	100.00 %
_____ Combined storm and sanitary sewer	_____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✔ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	1
ii. Discharges of untreated or partially treated effluent	0
iii. Combined sewer overflow points	0
iv. Constructed emergency overflows (prior to the headworks)	0
v. Other _____	_____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes ✔ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes ✔ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes ✔ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

_____

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ✔ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number 001

b. Location

Magna (City or town, if applicable)	84044 (Zip Code)
Salt Lake (County)	UT (State)
40°44'11.48" (Latitude)	112° 4'57.61" (Longitude)

c. Distance from shore (if applicable) 0.00 ft.

d. Depth below surface (if applicable) _____ ft.

e. Average daily flow rate 2.80 mgd

f. Does this outfall have either an intermittent or a periodic discharge? _____ Yes ✔ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? _____ Yes ✔ No

A.10. Description of Receiving Waters.

a. Name of receiving water C-7 Ditch

b. Name of watershed (if known) _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin (if known): _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable):
acute 9.50 cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

✔ Primary ✔ Secondary

____ Advanced ____ Other. Describe: ____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	85.00	%
Design SS removal	85.00	%
Design P removal	85.00	%
Design N removal	0.00	%
Other ____	____	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall? ____ Yes ✔ No

d. Does the treatment plant have post aeration? ____ Yes ✔ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.10	s.u.			
pH (Maximum)	7.80	s.u.			
Flow Rate	3.83	mgd	2.95	mgd	583.00
Temperature (Winter)	60.00	°F	57.00	°F	365.00
Temperature (Summer)	74.00	°F	72.00	°F	365.00

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5	21.00	mg/L	5.85	mg/L	165.00	SM5210-B	5
DEMAND (Report one)	CBOD-5							
FECAL COLIFORM		144.00	no./100mL	8.05	no./100mL	164.00	EPA 9223B	1
TOTAL SUSPENDED SOLIDS (TSS)		116.00	mg/L	15.41	mg/L	165.00	SM 2540D	7

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

200,000.00 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Continual system inspection, correction of problems as identified

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ✔ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

____Yes ✔ No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	3 / / 2018	/ /
– End construction	9 / / 2019	/ /
– Begin discharge	11 / / 2019	/ /
– Attain operational level	3 / / 2020	/ /

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ✔ Yes ___ No

Describe briefly: No permit required from ACOE.
Easement aquired for C-7 pipeline

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	5.00	mg/L	2.36	mg/L	22.00		
CHLORINE (TOTAL RESIDUAL, TRC)	0.80	mg/L	0.69	mg/L	366.00		
DISSOLVED OXYGEN	9.20	mg/L	8.09	mg/L	13.00		
TOTAL KJELDAHL NITROGEN (TKN)	7.00	mg/L	3.36	mg/L	22.00		
NITRATE PLUS NITRITE NITROGEN	12.00	mg/L	3.00	mg/L	22.00		
OIL and GREASE							
PHOSPHORUS (Total)	3.00	mg/L	2.14	mg/L	22.00		
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

✓ Basic Application Information packet

Supplemental Application Information packet:

✓ Part D (Expanded Effluent Testing Data)

✓ Part E (Toxicity Testing: Biomonitoring Data)

____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

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

Name and official title: Wastewater Manager

Signature: [signature]

Telephone number: 801-250-2795

Date signed: 6/4/2018

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	NS										
ARSENIC	0.06	mg/L	0.016	lb/day	0.037	mg/L	0.187	lb/day	8	EPA 200.7	0.05
BERYLLIUM	NS										
CADMIUM	ND	mg/L			ND	mg/L			8	EPA 200.7	0.005
CHROMIUM	ND	mg/L	NA	NA	ND	mg/L	NA	NA	8	EPA 200.7	0.005
COPPER	0.076	mg/L	0.500	lb/day	0.0117	mg/L	0.0591	lb/day	8	EPA 200.7	0.005
LEAD	0.02	mg/L	0.132	lb/day	0.0113	mg/L	0.0579	lb/day	8	EPA 200.7	0.02
MERCURY	ND	mg/L	NA	NA	ND	mg/L	NA	NA	8	EPA 200.7	0.0002
NICKEL	ND	mg/L	NA	NA	ND	mg/L	NA	NA	8	EPA 200.7	0.005
SELENIUM	0.16	mg/L	1.05	lb/day	0.03	mg/L	0.152	kg/day	8	EPA 200.7	0.02
SILVER	ND	mg/L	NA	NA	ND	mg/L	NA	NA	8	EPA 200.7	0.005
THALLIUM	NS										
ZINC	0.07	mg/L	0.461	lb/day	0.0356	mg/L	0.180	lb/day	8	EPA 200.7	0.01
CYANIDE	0.003	mg/L	0.0197	lb/day	0.00175	mg/L	0.00886	lb/day	8	EPA 200.7	0.002
TOTAL PHENOLIC COMPOUNDS	NS										
HARDNESS (AS $CaCO_3$)	590	mg/L	3880	lb/day	416	mg/L	2110	lb/day	14	EPA 130.2	
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:
Magna Water Reclamation Facility, UT0021440

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	ND									EPA 624	100 ug/L
ACRYLONITRILE	ND									EPA 624	50 ug/L
BENZENE	ND									EPA 624	2 ug/L
BROMOFORM	ND									EPA 624	5 ug/L
CARBON TETRACHLORIDE	ND									EPA 624	5 ug/L
CLOROBENZENE	ND									EPA 624	5 ug/L
CHLORODIBROMO-METHANE	ND									EPA 624	5 ug/L
CHLOROETHANE	ND									EPA 624	5 ug/L
2-CHLORO-ETHYLVINYL ETHER	ND									EPA 624	5 ug/L
CHLOROFORM	ND									EPA 624	5 ug/L
DICHLOROBROMO-METHANE	ND									EPA 624	5 ug/L
1,1-DICHLOROETHANE	ND									EPA 624	5 ug/L
1,2-DICHLOROETHANE	ND									EPA 624	5 ug/L
TRANS-1,2-DICHLORO-ETHYLENE	ND									EPA 624	5 ug/L
1,1-DICHLOROETHYLENE	ND									EPA 624	5 ug/L
1,2-DICHLOROPROPANE	ND									EPA 624	5 ug/L
1,3-DICHLORO-PROPYLENE	ND									EPA 624	5 ug/L
ETHYLBENZENE	ND									EPA 624	5 ug/L
METHYL BROMIDE	ND									EPA 624	5 ug/L
METHYL CHLORIDE	ND									EPA 624	5 ug/L
METHYLENE CHLORIDE	ND									EPA 624	10 ug/L
1,1,2,2-TETRACHLORO-ETHANE	ND									EPA 624	5 ug/L
TETRACHLORO-ETHYLENE	ND									EPA 624	5 ug/L
TOLUENE	ND									EPA 624	5 ug/L

FACILITY NAME AND PERMIT NUMBER:
Magna Water Reclamation Facility, UT0021440

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	ND								1	EPA 624	5 ug/L
1,1,2-TRICHLOROETHANE	ND								1	EPA 624	5 ug/L
TRICHLORETHYLENE	ND								1	EPA 624	5 ug/L
VINYL CHLORIDE	ND								1	EPA 624	5 ug/L
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL	ND								1	EPA 625	10 ug/L
2-CHLOROPHENOL	ND								1	EPA 625	10 ug/L
2,4-DICHLOROPHENOL	ND								1	EPA 625	10 ug/L
2,4-DIMETHYLPHENOL	ND								1	EPA 625	10 ug/L
4,6-DINITRO-O-CRESOL	ND								1	EPA 625	10 ug/L
2,4-DINITROPHENOL	ND								1	EPA 625	10 ug/L
2-NITROPHENOL	ND								1	EPA 625	10 ug/L
4-NITROPHENOL	ND								1	EPA 625	10 ug/L
PENTACHLOROPHENOL	ND								1	EPA 625	10 ug/L
PHENOL	ND								1	EPA 625	10 ug/L
2,4,6-TRICHLOROPHENOL	ND								1	EPA 625	10 ug/L
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE	ND									EPA 625	5 ug/L
ACENAPHTHYLENE	ND									EPA 625	5 ug/L
ANTHRACENE	ND									EPA 625	5 ug/L
BENZIDINE	ND									EPA 625	10 ug/L
BENZO(A)ANTHRACENE	ND									EPA 625	5 ug/L
BENZO(A)PYRENE	ND									EPA 625	5 ug/L

FACILITY NAME AND PERMIT NUMBER:
Magna Water Reclamation Facility, UT0021440

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	ND								1	EPA 625	5 ug/L
BENZO(GHI)PERYLENE	ND								1	EPA 625	5 ug/L
BENZO(K)FLUORANTHENE	ND								1	EPA 625	5 ug/L
BIS (2-CHLOROETHOXY) METHANE	ND								1	EPA 625	5 ug/L
BIS (2-CHLOROETHYL)-ETHER	ND								1	EPA 625	5 ug/L
BIS (2-CHLOROISO-PROPYL) ETHER	ND								1	EPA 625	5 ug/L
BIS (2-ETHYLHEXYL) PHTHALATE	ND								1	EPA 625	10 ug/L
4-BROMOPHENYL PHENYL ETHER	ND								1	EPA 625	5 ug/L
BUTYL BENZYL PHTHALATE	ND								1	EPA 625	5 ug/L
2-CHLORONAPHTHALENE	ND								1	EPA 625	5 ug/L
4-CHLORPHENYL PHENYL ETHER	ND								1	EPA 625	5 ug/L
CHRYSENE	ND								1	EPA 625	5 ug/L
DI-N-BUTYL PHTHALATE	ND								1	EPA 625	5 ug/L
DI-N-OCTYL PHTHALATE	ND								1	EPA 625	5 ug/L
DIBENZO(A,H) ANTHRACENE	ND								1	EPA 625	5 ug/L
1,2-DICHLOROBENZENE	ND								1	EPA 625	5 ug/L
1,3-DICHLOROBENZENE	ND								1	EPA 625	5 ug/L
1,4-DICHLOROBENZENE	ND								1	EPA 625	5 ug/L
3,3-DICHLOROBENZIDINE	ND								1	EPA 625	10 ug/L
DIETHYL PHTHALATE	ND								1	EPA 625	5 ug/L
DIMETHYL PHTHALATE	ND								1	EPA 625	5 ug/L
2,4-DINITROTOLUENE	ND								1	EPA 625	5 ug/L
2,6-DINITROTOLUENE	ND								1	EPA 625	5 ug/L
1,2-DIPHENYLHYDRAZINE	ND								1	EPA 625	10 ug/L

FACILITY NAME AND PERMIT NUMBER:
Magna Water Reclamation Facility, UT0021440

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	ND								1	EPA 625	5 ug/L
FLUORENE	ND								1	EPA 625	5 ug/L
HEXACHLOROBENZENE	ND								1	EPA 625	5 ug/L
HEXACHLOROBUTADIENE	ND								1	EPA 625	5 ug/L
HEXACHLOROCYCLO-PENTADIENE	ND								1	EPA 625	10 ug/L
HEXACHLOROETHANE	ND								1	EPA 625	5 ug/L
INDENO(1,2,3-CD)PYRENE	ND								1	EPA 625	5 ug/L
ISOPHORONE	ND								1	EPA 625	5 ug/L
NAPHTHALENE	ND								1	EPA 625	5 ug/L
NITROBENZENE	ND								1		5 ug/L
N-NITROSODI-N-PROPYLAMINE	ND								1	EPA 625	5 ug/L
N-NITROSODI- METHYLAMINE	ND								1	EPA 625	10 ug/L
N-NITROSODI-PHENYLAMINE	ND								1	EPA 625	5 ug/L
PHENANTHRENE	ND								1	EPA 625	5 ug/L
PYRENE	ND								1	EPA 625	5 ug/L
1,2,4-TRICHLOROBENZENE	ND								1	EPA 625	5 ug/L

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes ✔ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

A. GENERAL INFORMATION

All applicants must complete this section.

A.1. Facility Information.

a. Facility name: Magna Wastewater Treatment Facility

b. Mailing Address: 7650 West 2100 South

c. Contact person: Steve Williams

Title: Wastewater Operations Manager

Telephone number: (801) 250-2795

d. Facility Address (not P.O. Box): _____

e. Is this facility a Class I sludge management facility? ✔ Yes _____ No

f. Facility design flow rate: 4.00 mgd

g. Total population served: 32,111.00

h. Indicate the type of facility:

✔ Publicly owned treatment works (POTW)
_____ Privately owned treatment works
_____ Federally owned treatment works
_____ Blending or treatment operation
_____ Surface disposal site
_____ Sewage sludge incinerator
_____ Other (describe)

A.2. Applicant Information. If the applicant is different from the above, provide the following:

a. Applicant name: _____

b. Mailing Address: _____

c. Contact person: _____

Title: _____

Telephone number: _____

d. Is the applicant the owner or operator (or both) of this facility?

_____ owner _____ operator

e. Should correspondence regarding this permit should be directed to the facility or the applicant.

✔ facility _____ applicant

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

A.3. Permit Information.

a. Facility's NPDES permit number (if applicable): UT0021440

b. List, on this form or an attachment, all other Federal, State, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number	Type of Permit
UTL-021440	Biosolids Permit
UTROOOOOO	Storm Water Permit

A.4. Indian Country. Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?

_____Yes ✔ No If yes, describe: _____

A.5. Topographic Map. Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following information. Map(s) should include the area one mile beyond all property boundaries of the facility:

a. Location of all sewage sludge management facilities, including locations where sewage sludge is stored, treated, or disposed.

b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundaries.

A.6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

A.7. Contractor Information.

Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ✔ Yes _____No

If yes, provide the following for each contractor (attach additional pages if necessary):

a. Name: E. T. Technologies, Inc.

b. Mailing Address: 3110 W California Ave Ste. D Salt Lake City, UT 84104

c. Telephone Number: (801) 977-0731

d. Responsibilities of contractor: Transport, treatment of dewatered sewage sludge to Class B biosolids and final disposal via land application

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
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A.8. Pollution Concentrations: Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR Part 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC	16.52	EPA 6010B/3050B	20
CADMIUM	0.73	EPA 6010B/3050B	1
CHROMIUM	24.80	EPA 6010B/3050B	1
COPPER	428.00	EPA 6010B/3050B	1
LEAD	12.00	EPA 6010B/3050B	10
MERCURY	0.96	EPA 7471A	0.05
MOLYBDENUM	0.96	EPA 6010B/3050B	2
NICKEL	12.90	EPA 6010B/3050B	1
SELENIUM	11.60	EPA 6010B/3050B	10
ZINC	483.00	EPA 6010B/3050B	2

A.9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:

✓ Part 1 Limited Background Information packet

Part 2 Permit Application Information packet:

✓ Section A (General Information)

✓ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

____ Section C (Land Application of Bulk Sewage Sludge)

____ Section D (Surface Disposal)

____ Section E (Incineration)

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

Name and official title: Terry Pollock, General Manager

Signature: Terry V Pollock Date signed: 6/4/2018

Telephone number: 801-250-2118

Upon request of the permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge.

B.1. Amount Generated On Site.

Total dry metric tons per 365-day period generated at your facility: 623.00 dry metric tons

B.2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use, or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

a. Facility name _____

b. Mailing Address _____

_____

c. Contact person _____

Title _____

Telephone number _____

d. Facility Address (not P.O. Box) _____

_____

e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons

f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.

_____

_____

B.3. Treatment Provided At Your Facility.

a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?

_____ Class A _____ Class B ✓ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

_____

_____

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
_____ Option 8 (90 percent solids with unstabilized solids)
✓ None or unknown

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
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B.3. Treatment Provided At Your Facility. (con't)

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

e. Describe, on this form or another sheet of paper, any other sewage sludge treatment or blending activities not identified in (a) - (d) above:

Complete Section B.4 if sewage sludge from your facility meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of §503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction requirements in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage sludge from your facility does not meet all of these criteria.

B.4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.

a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: _____ dry metric tons

b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away for application to the land?

_____Yes _____No

Complete Section B.5. if you place sewage sludge in a bag or other container for sale or give-away for land application. Skip this section if the sewage sludge is covered in Section B.4.

B.5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

Complete Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or blending. This section does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered in Sections B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.

B.6. Shipment Off Site for Treatment or Blending.

a. Receiving facility name: E.T. Technologies

b. Mailing address: 3110 W California Avenue Ste. D
Salt Lake City, UT 84104

c. Contact person: Ted Sonnenburg

Title: Vice President

Telephone number: (801) 977-0731

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 623.00

B.6. Shipment Off Site for Treatment or Blending. (con't)

e. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ✔ Yes ____ No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

_____ Class A ✔ Class B _____ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

Composting

f. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?
✔ Yes _____ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
_____ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)
_____ Option 7 (75 percent solids with no unstabilized solids)
✔ Option 8 (90 percent solids with unstabilized solids)
_____ None

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge.

Composting

g. Does the receiving facility provide any additional treatment or blending activities not identified in (c) or (d) above? ____ Yes ✔ No

If yes, describe, on this form or another sheet of paper, the treatment or blending activities not identified in (c) or (d) above:

h. If you answered yes to (e), (f), or (g), attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).

i. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? _____ Yes ✔ No

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

Complete Section B.7 if sewage sludge from your facility is applied to the land, <u>unless</u> the sewage sludge is covered in:

- **Section B.4 (it meets Table 1 ceiling concentrations, Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); <u>or</u>**
- **Section B.5 (you place it in a bag or other container for sale or give-away for application to the land); <u>or</u>**
- **Section B.6 (you send it to another facility for treatment or blending).**

B.7. Land Application of Bulk Sewage Sludge.

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____ dry metric tons

B.7. Land Application of Bulk Sewage Sludge. (con't)

b. Do you identify all land application sites in Section C of this application? _____ Yes _____ No

If no, submit a copy of the land application plan with application (see instructions).

c. Are any land application sites located in States other than the State where you generate sewage sludge or derive a material from sewage sludge? _____ Yes _____ No

If yes, describe, on this form or another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

_____

_____

Complete Section B.8 if sewage sludge from your facility is placed on a surface disposal site.

B.8. Surface Disposal.

a. Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period: _____ dry metric tons

b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

_____ Yes _____ No

If no, answer B.8.c through B.8.f for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one such surface disposal site, attach additional pages as necessary.

c. Site name or number _____

d. Contact person _____

Title _____

Telephone number _____

Contact is _____Site owner _____Site operator

e. Mailing address _____

_____

f. Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period: _____ dry metric tons

Complete Section B.9 if sewage sludge from your facility is fired in a sewage sludge incinerator.

B.9. Incineration.

a. Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period: _____ dry metric tons

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? _____ Yes _____ No

If no, complete B.9.c through B.9.f for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one such sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number: _____

d. Contact person: _____

Title: _____

Telephone number: _____

Contact is: _____ Incinerator owner _____ Incinerator operator

B.9. Incineration. (con't)

e. Mailing address: _____

_____

f. Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period: _____ dry metric tons

Complete Section B.10 if sewage sludge from this facility is placed on a municipal solid waste landfill.

B.10. Disposal in a Municipal Solid Waste Landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

a. Name of landfill _____

b. Contact person _____

Title _____

Telephone number _____

Contact is _____ Landfill owner _____ Landfill operator

c. Mailing address _____

_____

d. Location of municipal solid waste landfill:

Street or Route # _____

County _____

City or Town _____ State _____ Zip _____

e. Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:

_____ dry metric tons

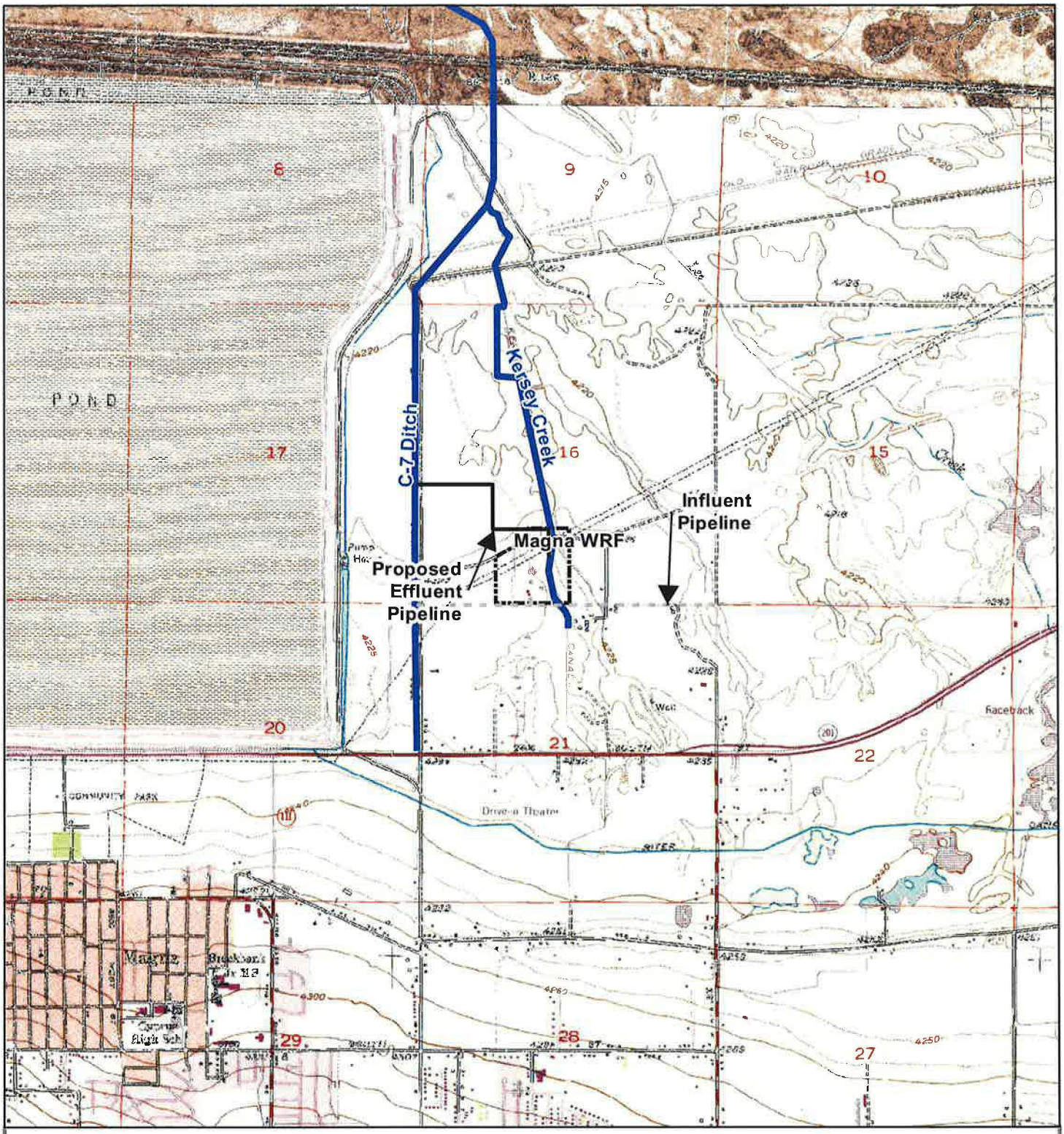
f. List, on this form or an attachment, the numbers of all other Federal, State, and local permits that regulate the operation of this municipal solid waste landfill.

Permit Number	Type of Permit
_____	_____
_____	_____
_____	_____

g. Submit, with this application, information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test)

h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?

_____ Yes _____ No



Legend

Name

- Waterbody
- Facility Boundary
- Influent Pipeline
- Proposed Effluent Pipeline

N

0 1"

1 in = 2,500 ft

MAGNA TOPOGRAPHIC MAP

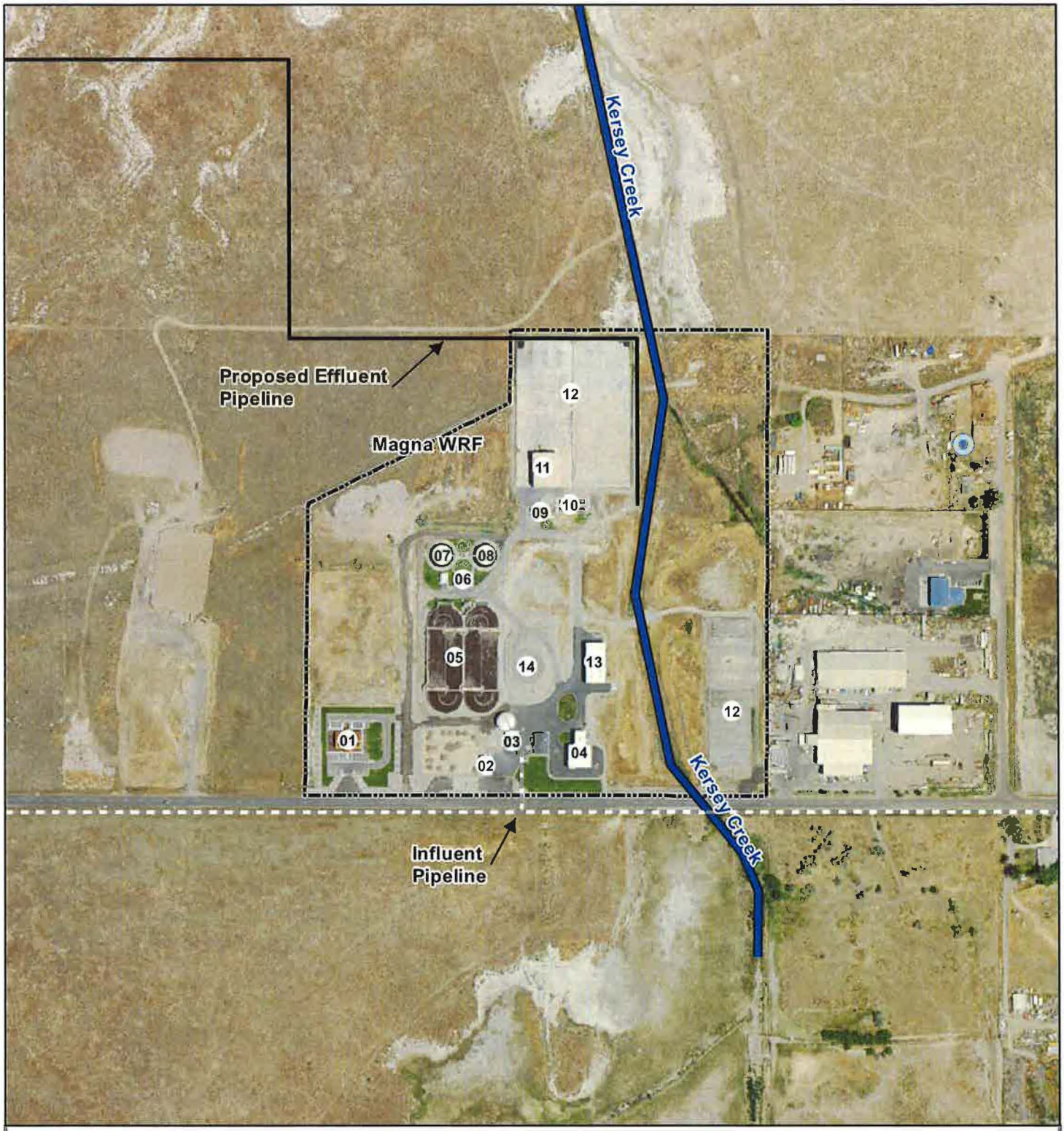
FIGURE 1.1

Magna Water District

PERMIT RENEWAL APPLICATION

carollo

\\Client\UT\Magna\9910D00\Data\GIS\Magna Topographic Map.mxd



Legend

- Waterbody
- Facility Boundary
- Influent Pipeline
- Proposed Effluent Pipeline
- 01-Administration Building
- 02-Operations Building
- 03-West Headworks
- 04-East Headworks
- 05-Oxidation Ditches
- 06-RAS/WAS Pumping
- 07-Secondary Clarifier 1
- 08-Secondary Clarifier 2
- 09-Chlorination
- 10-Contact Basins
- 11-Sludge Dewatering
- 12-Sludge Drying Beds
- 13-BIOBROx Treatment
- 14-Utility Water Tank
- Well

0 1"

1 in = 400 ft

MAGNA FACILITY MAP

FIGURE 1.2

Magna Water District

PERMIT RENEWAL APPLICATION

carollo

\\Client\UT\Magna\9910D001\Data\GIS\Magna Topographic Map.mxd