

14. Method(s) of Liquids Reduction or Processing (Form SW-S1, Box 27)	<input type="checkbox"/> Surface Evaporation	Reduction Capacity:	Units:
	<input type="checkbox"/> Aeration/Accelerated Evap. (Box 23) – Description:	Reduction Capacity:	Units:
	<input type="checkbox"/> Solidification/ Bulking Material(s) – Description:	Reduction Capacity:	Units:
	<input type="checkbox"/> Other Method(s) of Treatment or Processing (Explain or Attach Additional Information):		
Is supporting documentation attached to this application ? <input type="checkbox"/> Yes <input type="checkbox"/> No			
15. Facility Design Map(s)	Is a site map or maps depicting the items below attached to this application? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	a. Surface water and erosion control systems; b. All impoundment and waste management areas including areas for receiving, evaluation, storage, processing; waste separation or bulking/solidification areas; sludge storage areas, etc; c. Location of any non-waste storage areas (bulking materials, stocks of processing product, etc.); d. Design topography after facility closure; e. All soil and water table test boring holes, wells or excavations; f. Areas of planned expansion; g. Buildings and other improvements; and h. Contour lines at five (5) foot intervals within the operating area and ten (10) foot intervals to the facility boundary.		
DESIGN AND CONSTRUCTION ELEMENTS			
16. Plans and Specifications	Provide a list of necessary plans and specifications attached to this application:		
	Are all plans and specifications attached to this application and stamped by an engineer? <input type="checkbox"/> Yes <input type="checkbox"/> No		
17. Site-Wide Storm Water Management Plan	Provide a brief narrative description of the site-wide storm water management plan that demonstrates proper management of a 24-hour, 25-year storm event. Physical elements of storm water management systems should be included in the plans and specifications.		
	Is a Storm Water Management Plan attached to this application? <input type="checkbox"/> Yes <input type="checkbox"/> No		
18. Operational Design Capacity (Form SW-S1, Box 28)	Numerical operational design capacity, and a brief narrative description, for each independent pumpable waste treatment/storage train, expressed in gallons per month.		
	Is supporting information attached to this application? <input type="checkbox"/> Yes <input type="checkbox"/> No		
19. Sludge Management	Briefly describe the physical and operational elements of the facility's Sludge Management Plan and attach the plan.		
	Is the facility's Sludge Management Plan attached to this application? <input type="checkbox"/> Yes <input type="checkbox"/> No		
20. Hydro-Geologic Investigation (Form SW-S1, Box 26)	Is a hydro-geologic investigation report prepared by a qualified professional attached to this application, or has it been previously provided to DEQ? <input type="checkbox"/> Yes <input type="checkbox"/> No Explain:		

21. Ground Water Monitoring Plan	<p>Is a Ground Water Monitoring Plan attached to this Design Application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No Explain:</p>
22. Design of Liner(s)	<p>Briefly describe the each of the facility's liner design(s) and attach additional information.</p> <p>Is supporting information attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
23. Design of Leak Detection System(s)	<p>Briefly describe the facility's physical leak detection system(s) and/or operational leak detection strategy(s), and attach additional information. Physical elements of leak detection systems should be included in the plans and specifications.</p> <p>Is supporting information attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
24. Accelerated Evaporation System(s)	<p>If a facility uses aerators, atomizer evaporation systems, or other systems to accelerate evaporation where waste may become airborne, identify these systems here and attach information.</p> <p>Is supporting information attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
25. Waste Incompatibility	<p>Identify any waste incompatibility issues that may be encountered at the facility and the facility's strategy for avoiding incompatibility issues. Attach additional information as necessary.</p> <p>Is additional information attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
26. Odor Management Plan	<p>Briefly describe the physical and operational elements of the facility's Odor Management Plan and attach the plan.</p> <p>Is the Odor Management Plan attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
27. Toxic and Flammable Gas Monitoring	<p>Facilities are required to install appropriate toxic and flammable gas monitoring devices where the location, geophysical conditions, and waste characteristics indicate that there is a reasonable probability that the facility will generate toxic and/or flammable gas (1) exceeding twenty-five (25) percent of the lower explosive limit for gases in facility structures, (2) exceeding the lower explosive limit at the property boundary, or (3) otherwise presenting a potential threat to public health or the environment.</p> <p>Brief Narrative Description:</p> <p>Is supporting information attached to this application?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

All Attachments with supporting documentation must be referenced to the appropriate Application box number and, if applicable, sub-box letter.

[Signatures and Certifications on Next Page]

1. Applicant (Operator) Name (Form SW-G1, Box 1):	2. Facility Common/Other Name (Form SW-G1, Box 4):

Certification by Responsible Person for Applicant

I hereby certify that I have the authority to represent the Applicant identified above and, based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete.

Signature Title Date

Print or Type Name

OR

If a registered P.E. or P.G. prepares application, please affix stamp.

I am a registered professional engineer or registered professional geologist in the State of Idaho and qualified to evaluate and certify compliance with the location criteria for a non-municipal solid waste management facility. I certify that this application was prepared by me or under my direct supervision.

Signature Title Date

Print or Type Name

[affix seal]

Special Conditions of Approval (if Applicable):

<p>Within 30 days of completion of construction submit as-built plans or certification that all elements were constructed in conformance with the approved design / plans and specifications.</p>

Applicant Acknowledgement

Signature

DEQ Design Approval

Subject to any special conditions listed above, this final, complete Design Approval Application is approved by the Idaho Department of Environmental Quality as of the date of signature below. This submission and approval, in its entirety, constitutes the facility's Approved Design and should be kept on-site as part of the facility's Operating Record.

Signature Title Date

Print or Type Name

Instructions for Form SW-D2

Submit this form for DEQ to review the sufficiency of the design elements that have been selected for the facility, for DEQ to review a design modification, or to change information provided on a previously submitted Form SW-D2. The form provides DEQ with design details and acts as a checklist to ensure that all required information is submitted along with the form. All attachments should reference the appropriate box number (and sub-box letter if applicable) and be attached in the order presented on the form. The final, complete submission, once approved by DEQ, is the facility's Approved Design and should be kept on-site in the facility's Operating Record. As a condition of approval as-built plans, or a certification that all elements were constructed in conformance with the approved design / plans and specifications, will need to be submitted.

General Facility Information:

1. Provide the same information that was provided on Form SW-G1 in Box #1.
2. Provide the same information that was provided on Form SW-G1 in Box #4.
3. Provide the same information that was provided, or was provided by DEQ, on Form SW-G1 in Box #2.
- 4-8. Provide the name of the person(s) DEQ should contact regarding this application. Provide title(s), telephone number(s), mailing address(es), and e-mail address(es) for the contact person(s). This may be a consultant or a facility employee – whoever has the technical knowledge to discuss the application and any modifications that may be necessary.
9. Provide any additional information that may be necessary to efficiently correspond with the contact person(s) listed in Box #4.
10. Provide the same information that was provided on Form SW-G1, Box #16a-e. If the information does not match then an updated Form SW-G1 will be required.
11. Provide the same information that was provided on Form SW-S1, Box #13a-b. If the information does not match then the site will be re-evaluated and an updated Form SW-S1 will be required. For NSWI facilities that have additional solid waste operations identify only the NSWI waste types that are managed.
- 11b. This total should relate to the facility's operational design capacity(s) calculated on Form SW-S1, Box #28, and provided below in Box #18. Please ensure that relationship is explained.
12. If you are applying for a site-specific classification you will be required to submit this design approval application and a draft Operating Plan along with your Site Approval Application Form SW-S1 in order for DEQ to review design and operational measures alongside site characteristics.
13. Provide the same information that was provided on Form SW-S1, Box #25. If the information does not match then the site will be re-evaluated and an updated Form SW-S1 will be required.
14. Provide the same information that was provided on Form SW-S1, Box #27. If the information does not match then the site will be re-evaluated and an updated Form SW-S1 will be required.
15. Provide a site-wide map or maps that depict all elements a. through h. If a facility re-locates an engineered element depicted in a map, a new map and approved Form SW-D2 (design modification) will be required.

Design and Construction Elements:

16. Submit plans and specifications for the following elements of the facility: waste impoundments and liners, leak detection systems, any buildings/structural improvements which are integral elements of the waste management systems, waste and non-waste storage or mixing pads, processing equipment such as accelerated evaporation systems, storm water run-on/run-off system elements, monitoring wells, and any other integral engineered elements of the waste management system. Any necessary alterations to the approved plans and specifications should be submitted for review and approval PRIOR TO construction. Applicant will submit "as-built" plans and specifications once construction is completed.
17. Provide a site-wide storm water management plan. Stormwater structures and elements will also be depicted in the facility design map (Box #15) and the plans and specifications (Box #16). Note that the facility may also be required to obtain an NPDES/IPDES storm water permit. The physical elements of storm water management systems should be included in the plans and specifications and the operational elements of a storm water management plan should be incorporated into the facility Operating Plan.
18. Provide the same information that was provided on Form SW-S1, Box #28. If the information does not match then the site will be re-evaluated and an updated Form SW-S1 will be required.
19. Engineered structures are likely to be required for proper management of sludge removed from impoundments. Accommodations will be required for sludge removal, analysis, processing, storage, and disposal. A Sludge Management Plan will address all physical and operational elements in a cohesive manner. The physical elements of sludge management systems should be included in the plans and specifications and operational elements should be incorporated into the facility Operating Plan.
20. A hydro-geologic investigation report should have been provided as part of the Site Approval Application, Form SW-S1, Box #26. You may either re-attach the report or clearly reference the location of the report in the previous submittal.
21. Groundwater monitoring wells and a Groundwater Monitoring Plan will be required unless a facility applies for a site-specific Tier

II facility classification. In certain instances a NSWI facility requesting Tier II status may substitute other design and operational measures for groundwater monitoring if such measures can be shown to be equally or more protective of groundwater resources. The physical elements of ground water monitoring systems should be included in the plans and specifications and operational elements should be incorporated into the facility Operating Plan.

22. The liner used for each impoundment should be briefly described and additional information about each liner should be attached. The liner design(s) should account for liner compatibility with the waste being managed, the specific risks associated with that waste, and the potential for migration of liquid and gaseous contaminants to ground water. All liners should be included in the plans and specifications.
23. A leak detection system may include physical elements such as a monitored secondary liner, underdrain systems, and/or lysimeters, as well as operational elements such as seepage testing and visual inspection at regular intervals.
24. All physical elements of accelerated evaporation systems should be included in the plans and specifications, and operational elements should be incorporated by reference into the facility Operating Plan.
25. Identify any incompatibility issues relating to the waste types the facility will receive that may have unwanted regulatory consequences, result in odor or other nuisance conditions, or create chemical reactions and safety concerns. Describe the facility's strategy for avoiding the identified consequences, conditions and/or concerns. Whenever possible, DEQ recommends designing facilities to keep distinct waste trains segregated from one another. A detailed waste compatibility study may be requested when a facility proposes to intermingle multiple waste trains. Operational elements of the facility's strategy should be incorporated by reference into the facility Operating Plan.
26. An Odor Management Plan will take into account the specific waste types and volumes managed at the site, as well as detailed response protocol(s) for odor incidents. The physical elements of odor management systems should be included in the plans and specifications and operational elements should be incorporated by reference into the facility Operating Plan.
27. Facilities should evaluate the types and quantities of wastes being managed at the facility and identify whether those wastes will form toxic or flammable gas. The collection of flammable gasses inside structures can lead to explosions or fires. In some cases an air permit may be required.

Certification of Truth, Accuracy, and Completeness (by a Qualified Professional):

The Site Approval Application should be signed and certified by a Professional Engineer or Professional Geologist. Provide the name, title, date and signature of the qualified professional. If a qualified professional is not used to prepare the application please contact DEQ.

FOR ADDITIONAL ASSISTANCE

DEQ has prepared a guidance document for the siting design and operation of nonhazardous solid waste impoundment (NSWI) facilities. The guidance document is available on DEQ's website. For additional questions please contact the DEQ Solid Waste Program staff member in your region:

DEQ Boise Regional Office
1445 N. Orchard St.
Boise, ID 83706
ph: (208) 373-0550
fx: (208) 373-0287
toll-free: (888) 800-3480

DEQ Idaho Falls Regional Office
900 N. Skyline Drive, Suite B
Idaho Falls, ID 83402
ph: (208) 528-2650
fx: (208) 528-2695
toll-free: (800) 232-4635

DEQ Pocatello Regional Office
444 Hospital Way, #300
Pocatello, ID 83201
ph: (208) 236-6160
fx: (208) 236-6168
toll-free: (888) 655-6160

DEQ Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
ph: (208) 769-1422
fx: (208) 769-1404
toll-free: (877) 370-0017

DEQ Lewiston Regional Office
1118 F St.
Lewiston, ID 83501
ph: (208) 799-4370
fx: (208) 799-3451
toll-free: (877) 541-3304

DEQ Twin Falls Regional Office
650 Addison Avenue West, Suite 111
Twin Falls, ID 83301
ph: (208) 736-2190
fx: (208) 736-2194
toll-free: (800) 270-1663