

Landfill Siting & Permitting an Inert Waste Landfill



What is a landfill?

NDCC 23-29-03. Definitions. a publicly or privately owned area of land where solid wastes are permanently disposed.



Not all Waste Goes to One Place!

- All trash is not created equal
- Waste materials are separated and disposed of in the appropriate type of landfill and/or the appropriate segregated space in a landfill



In ND there are 4 Different Types of Landfills Found

- Municipal Solid Waste (MSW)



- Industrial



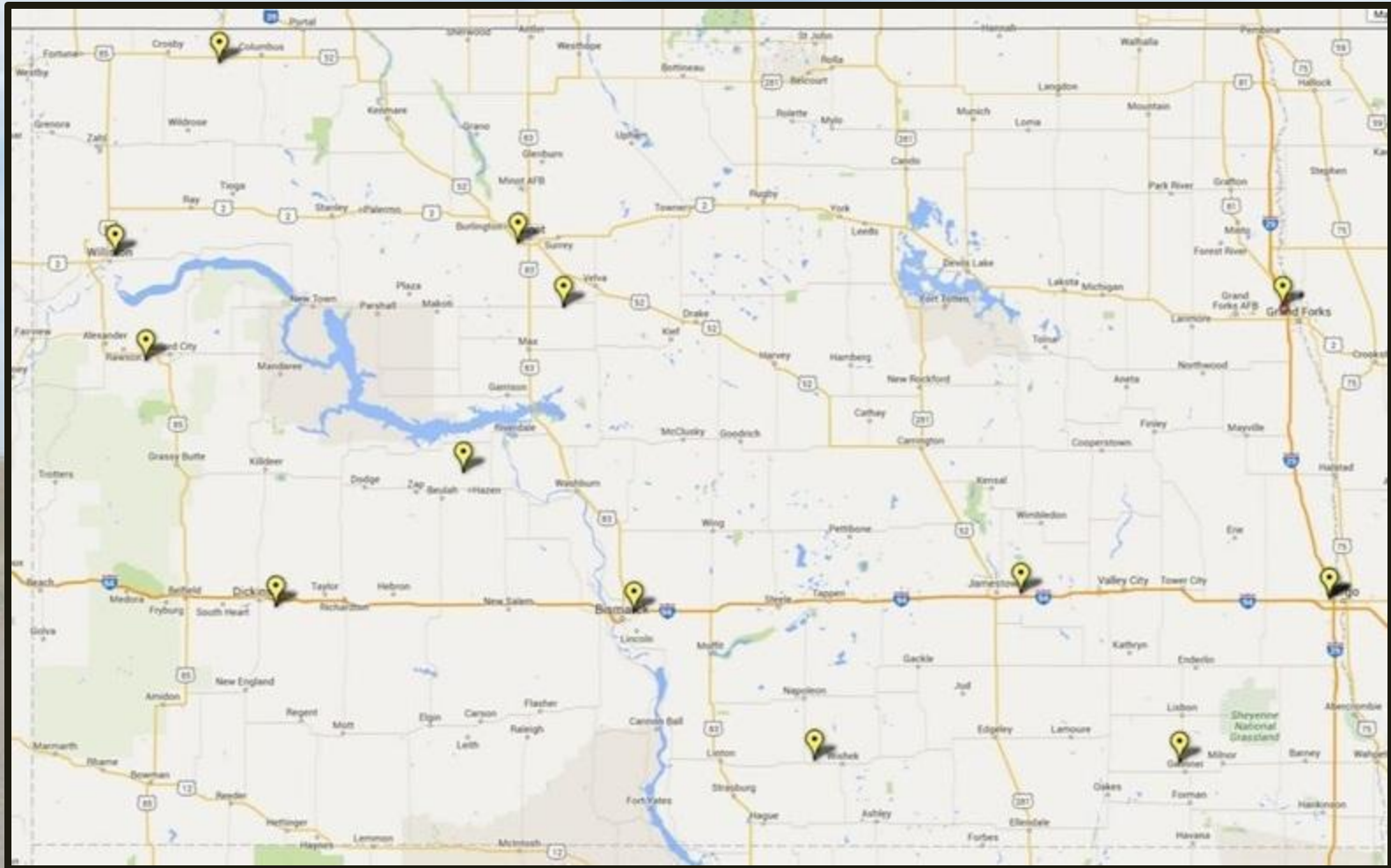
- Special



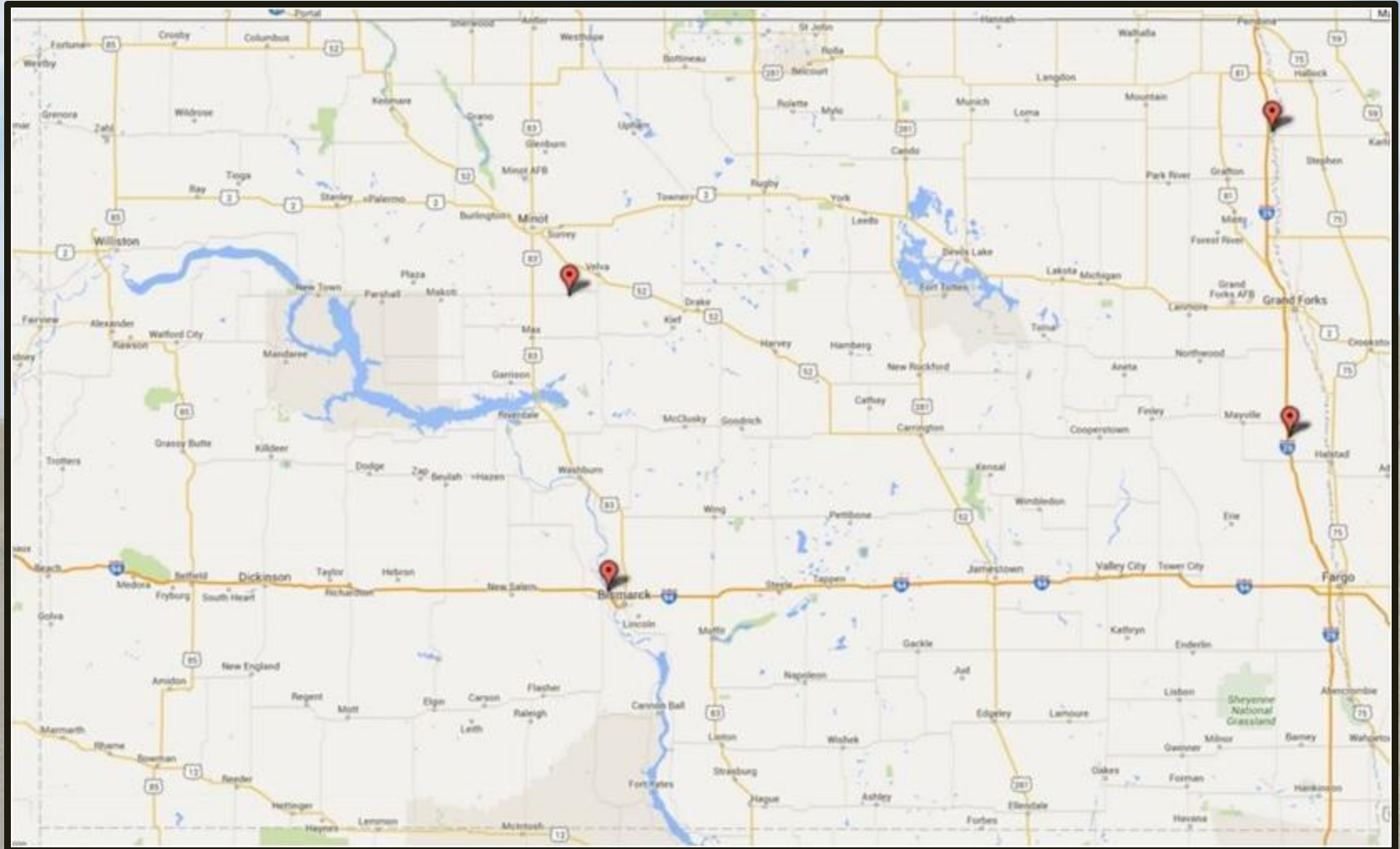
- Inert



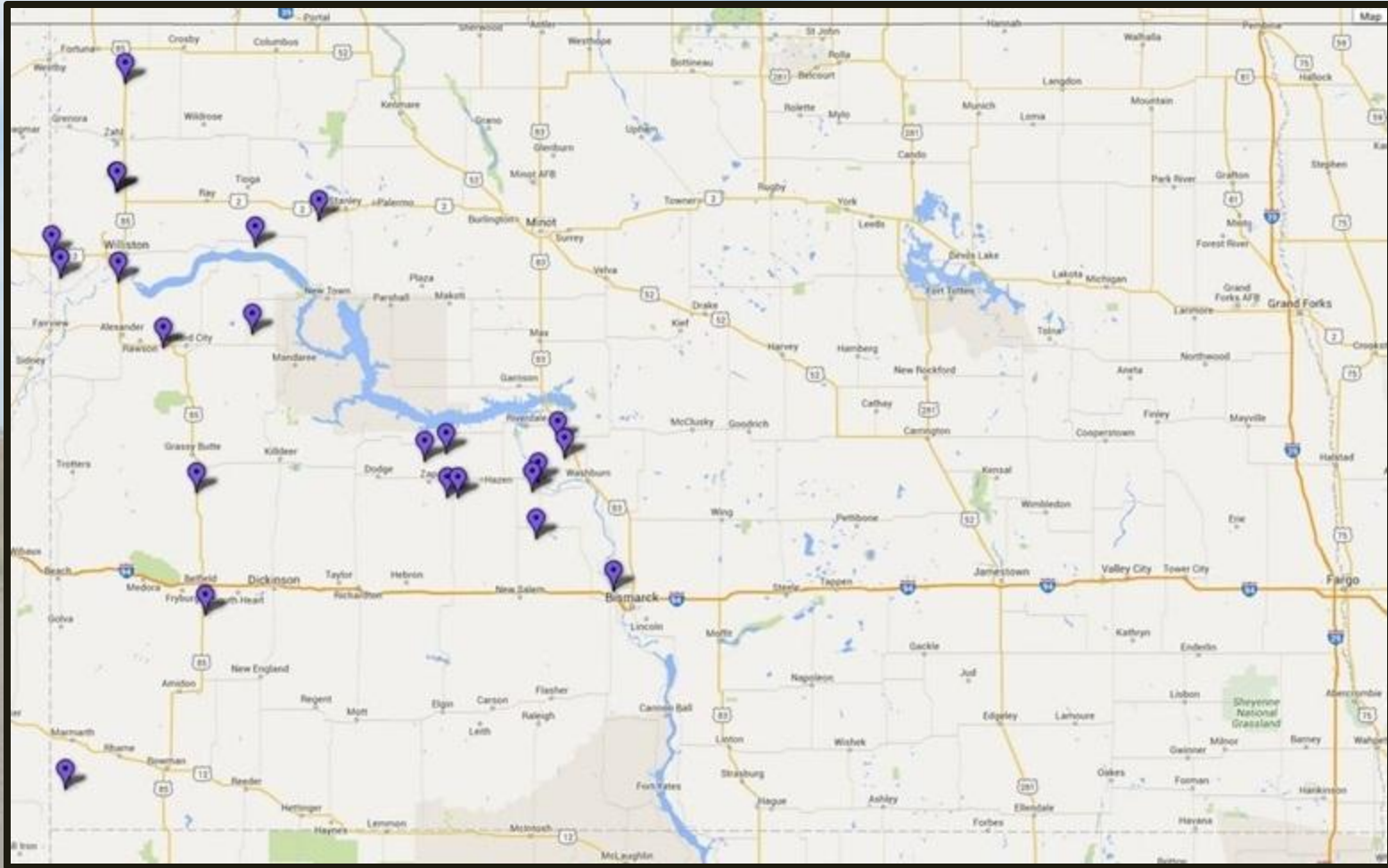
MSW Landfill Locations



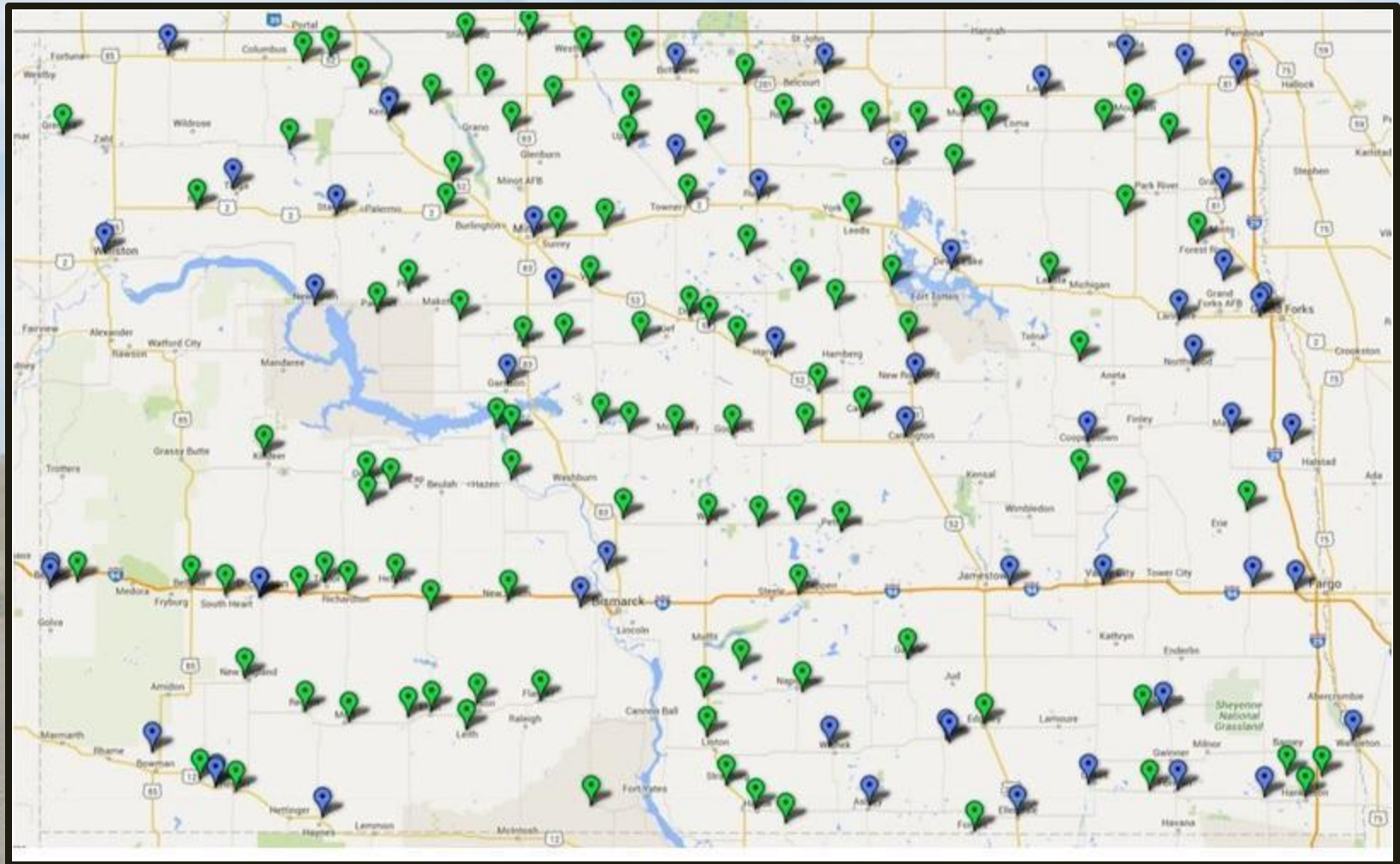
Industrial Waste Landfill Locations



Special Waste Landfill Locations



Inert Waste Landfill Locations



Landfill Locations in ND

Industrial – red

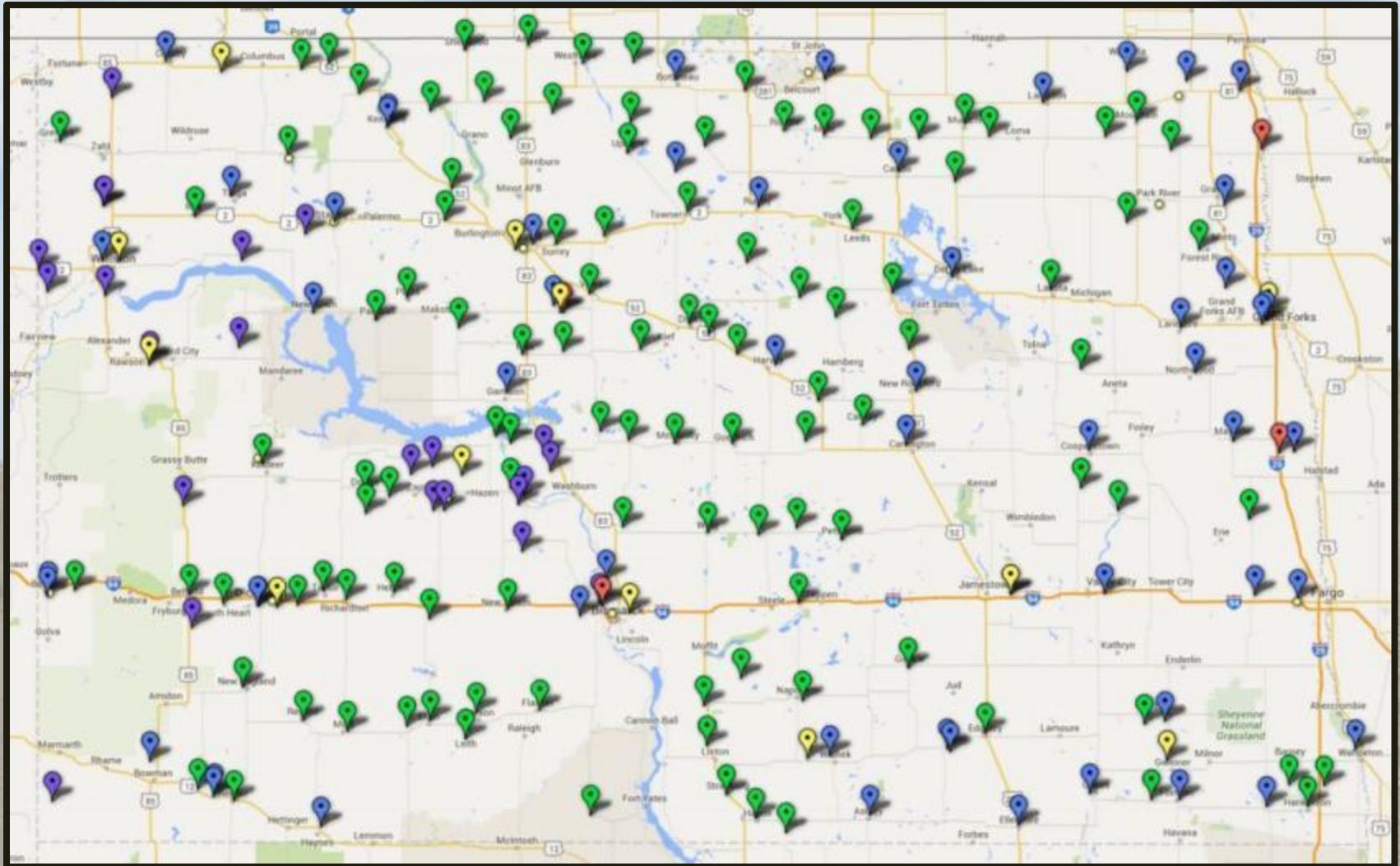
MSW – yellow

permitted inert - blue

special – purple

Transfer Stations – sm. yellow

PBR inert - green



What is an Inert Waste?

“Inert waste” means nonputrescible solid waste which will not generally contaminate water or form a contaminated leachate. Inert waste does not serve as food for vectors. Inert waste includes, but is not limited to: construction and demolition material such as metal, wood, bricks, masonry and cement concrete; asphalt concrete; metal; tree branches; bottom ash from coal fired boilers; and waste coal fines from air pollution control equipment.

Inert waste does not produce a contaminated leachate.



What is an Inert Waste?

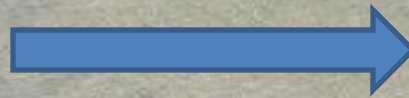
Biggest difference between what materials are acceptable at an inert waste landfill and other types of landfills is that inert waste landfills don't produce contaminated leachate.



What is Leachate?

“Leachate” means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

Coffee is a great example of leachate.



Inert Waste Landfills

ND is unique compared to many other areas in the US. It is composed of many small communities and large landfills are not practical. Inert waste landfills provide a location for small volume inert disposal in a centralized location.



Inert Waste Landfills

Some examples of inert waste materials:

- Trees/brush
- Concrete
- Metal
- Some furniture



Inert Waste Landfills

Care needs to be taken that **ONLY** inert waste is being disposed of in an inert waste landfill!



Guideline 16 - OPERATION OF INERT WASTE LANDFILLS

SITE SELECTION:



GUIDELINE 16 – OPERATION OF INERT WASTE LANDFILLS

North Dakota Department of Health - Division of Waste Management

918 E. Divide Ave., 3rd Fl., Bismarck, ND 58501-1947

Telephone: 701.328.5166 • Fax: 701.328.5200 • Website: www.ndhealth.gov/wm

Updated 03-2014

I. Introduction

Many communities in North Dakota may wish to develop sites for disposing inert wastes routinely generated by their citizens and businesses. The purpose of this guideline is to illustrate the requirements of state rules and describe the proper operation and maintenance of inert waste landfills. The North Dakota Department of Health, Division of Waste Management (telephone: 701.328.5166) administers the North Dakota Solid Waste Management Rules, which regulate such facilities.

Inert waste includes construction and demolition material such as metal, wood, bricks, masonry and cement concrete; asphalt concrete; tires; metal; tree branches; bottom ash from coal fired boilers; and waste coal fines from air pollution control equipment. Metal wastes such as washers, dryers, and other scrap metal may be stockpiled at an inert waste landfill for recycling. Inert wastes are those types of bulky wastes that normally do not pose significant hazards of environmental degradation. Inert waste will not generally contaminate water or form a contaminated leachate and does not serve as food for vectors.

The Department has established two categories for operation of inert waste landfills. Inert waste landfills operated for municipalities servicing populations of less than 1,000 people are eligible to operate under the Permit-By-Rule provision. These communities need only submit a notifying form and adhere to the applicable rules. Communities of more than 1,000 people or commercial entities are required to obtain an inert waste landfill permit.

The first seven sections (I through VII) of this guidance document apply to all inert waste landfills. Sections VIII and IX apply to permitted landfills, but "Permit-By-Rule" landfills may consider following these sections as well. Section XII describes permit application procedures for operators of inert waste landfills requiring a permit.

II. Site Selection

An inert waste disposal site must be carefully selected so that it is relatively high (ravines, potholes, and sloughs are not suited for landfills), well drained, and dry. The site should be underlain with clay-rich soil to help reduce any hazard of groundwater contamination. The following characteristics define a suitable site:

- A. Site slope: 6 percent maximum.
- B. Minimum distance to surface water: 200 feet.
- C. Minimum distance to residences or buildings: site-specific; in general, 200 feet.
- D. Minimum depth of 15 or more feet to seasonal high water table for most soils.



SITE SELECTION



NO ravines, potholes, sloughs



YES to dry, well-drained, clay rich soils

Remember: Landfills should be located in “good land”. If the proposed location is bad/marginal farmland it probably is a bad location for a landfill.



SITE SELECTION



YES

- 6% or less site slope
- Surface water more than 200 feet away
- Buildings more than 200 feet away
- Seasonal high water table more than 15 feet deep
- Slow to moderate permeability of soil – clay rich



SITE SELECTION



NO

- aquifer
- wellhead protection area
- 100 year flood plain
- mines
- ravines
- woody draw

- critical habitats
- glacial drift aquifers
- drinking water wells
- surface water
- surface mines
- state or national park



SITE SELECTION TOOLS

U.S. Fish and Wildlife Service Wetland Mapper



<http://www.fws.gov/wetlands/Data/Mapper.html>



SITE SELECTION TOOLS

U.S. Fish and Wildlife Service Wetland Mapper

Wetlands Mapper Legend Categories

of viewing the map information, wetland types are displayed in groups of similar classifications (e.g. all freshwater emergent wetlands are displayed as a single color category). The display categories are shown in the table below. Wetlands descriptions, codes and codes are explained further in [Wetlands Codes](#).

Status and Trends »	Display Color	Wetland Type	Map Code	Cowardin	General Description
Wetlands Layer »	R 0 G 136 B 55	Freshwater-Forested and Shrub wetland	PFO, PSS	Palustrine forested and/or Palustrine shrub	Forested swamp or wetland shrub bog or wetland
Other Topics »	R 127 G 195 B 28	Freshwater Emergent wetland	PEM	Palustrine emergent	Herbaceous march, fen, swale and wet meadow
National Wetlands Inventory	R 104 G 140 B 192	Freshwater pond	PUB, PAB	Palustrine unconsolidated bottom, Palustrine aquatic bed	Pond
Contact Information »	R 102 G 194 B 165	Estuarine and Marine wetland	E2, M2	Estuarine intertidal and Marine intertidal wetland	Vegetated and non-vegetated brackish and saltwater marsh, shrubs, beach, bar, shoal or flat
Help and Contacts	R 1 G 144 B 191	Riverine	R	Riverine wetland and deepwater	River or stream channel
Frequently Asked Questions		Lakes	L	Lacustrine wetland and deepwater	Lake or reservoir basin
Contact Us	R 0 G 124 B 136	Estuarine and Marine Deepwater	E1, M1	Estuarine and Marine subtidal water and wetland	Open water estuary, bay, sound, open ocean
Search Engine	R 178 G 134 B 83	Other Freshwater wetland	Misc types	Palustrine wetland	Farmed wetland, saline seep and other miscellaneous wetland

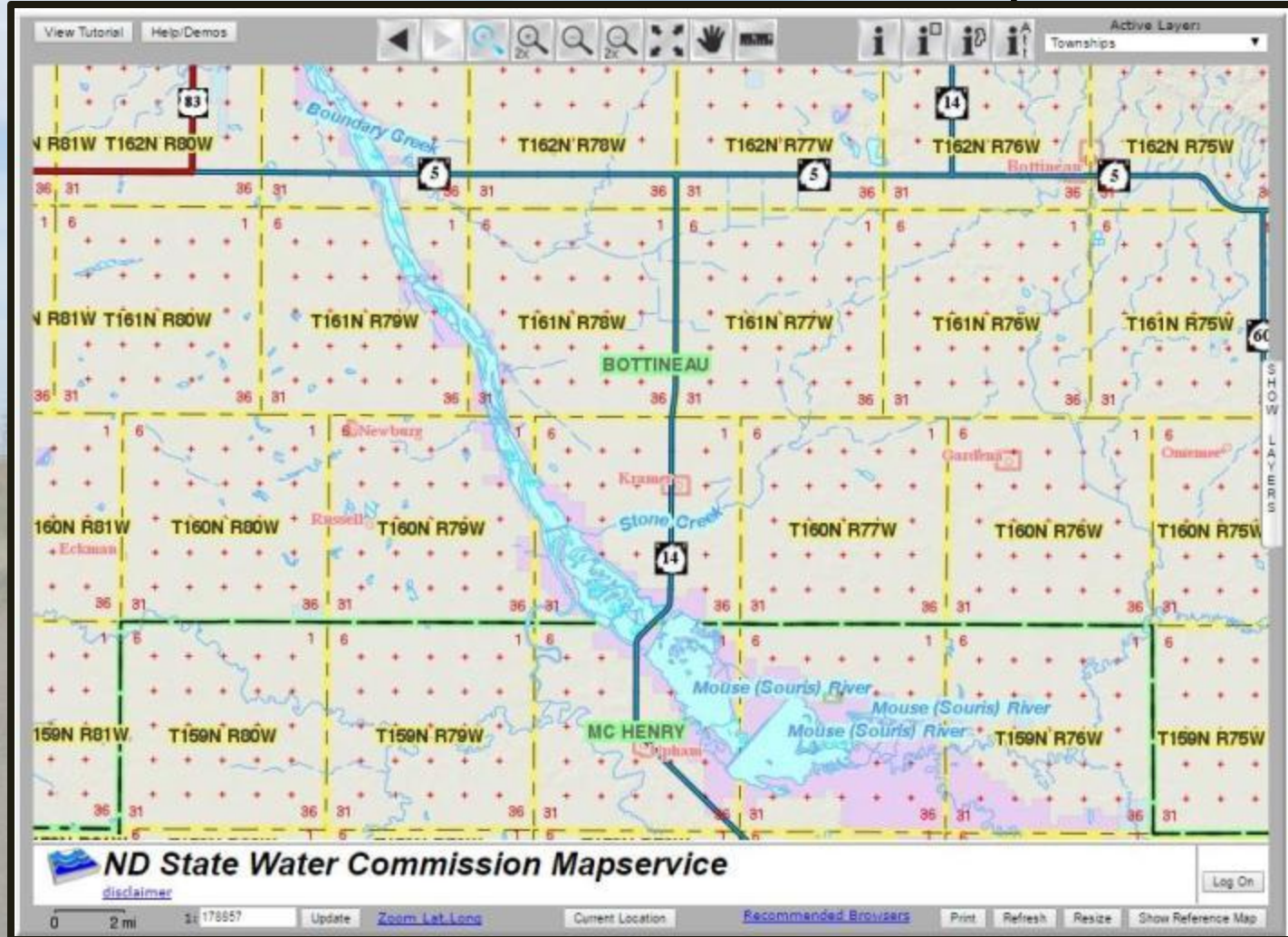
Last updated: May 9, 2016

<http://www.fws.gov/wetlands/Data/Mapper-Wetlands-Legend.html>



SITE SELECTION TOOLS

ND State Water Commission Mapservice



<http://mapservice.swc.nd.gov/>



SITE SELECTION TOOLS

ND State Water Commission Mapservice

The screenshot displays the ND State Water Commission Mapservice interface. The main map area shows a grid of townships and ranges, with various water resources overlaid. The legend on the right lists numerous well types and water features, including:

- Political Boundaries
- Air Photos/Imagery
- Public Lands
- Prohibited Areas
- Hydrography
- Water Resources
 - Aquifers
 - Precipitation Sites
 - Drillers Logs
 - USGS Gages
 - Ground/Surface Water Sites
 - Domestic Well
 - Domestic Well - Plugged
 - Industrial Well
 - Industrial Well - Plugged
 - Irrigation Well
 - Irrigation Well - Plugged
 - Multi-Well Sample
 - Municipal Well
 - Municipal Well - Plugged
 - Observation Well
 - Observation Well - Destroyed
 - Observation Well - Plugged
 - Observation Well - Recorder
 - Production Well
 - Production Well - Plugged
 - Rural Water Well
 - Stock Well
 - Stock Well - Plugged
 - Surface Water Monitoring Site
 - Test Hole
 - Test Well

The map shows a grid of townships and ranges, with various water resources overlaid. The legend on the right lists numerous well types and water features, including:

ND State Water Commission Mapservice
disclaimer

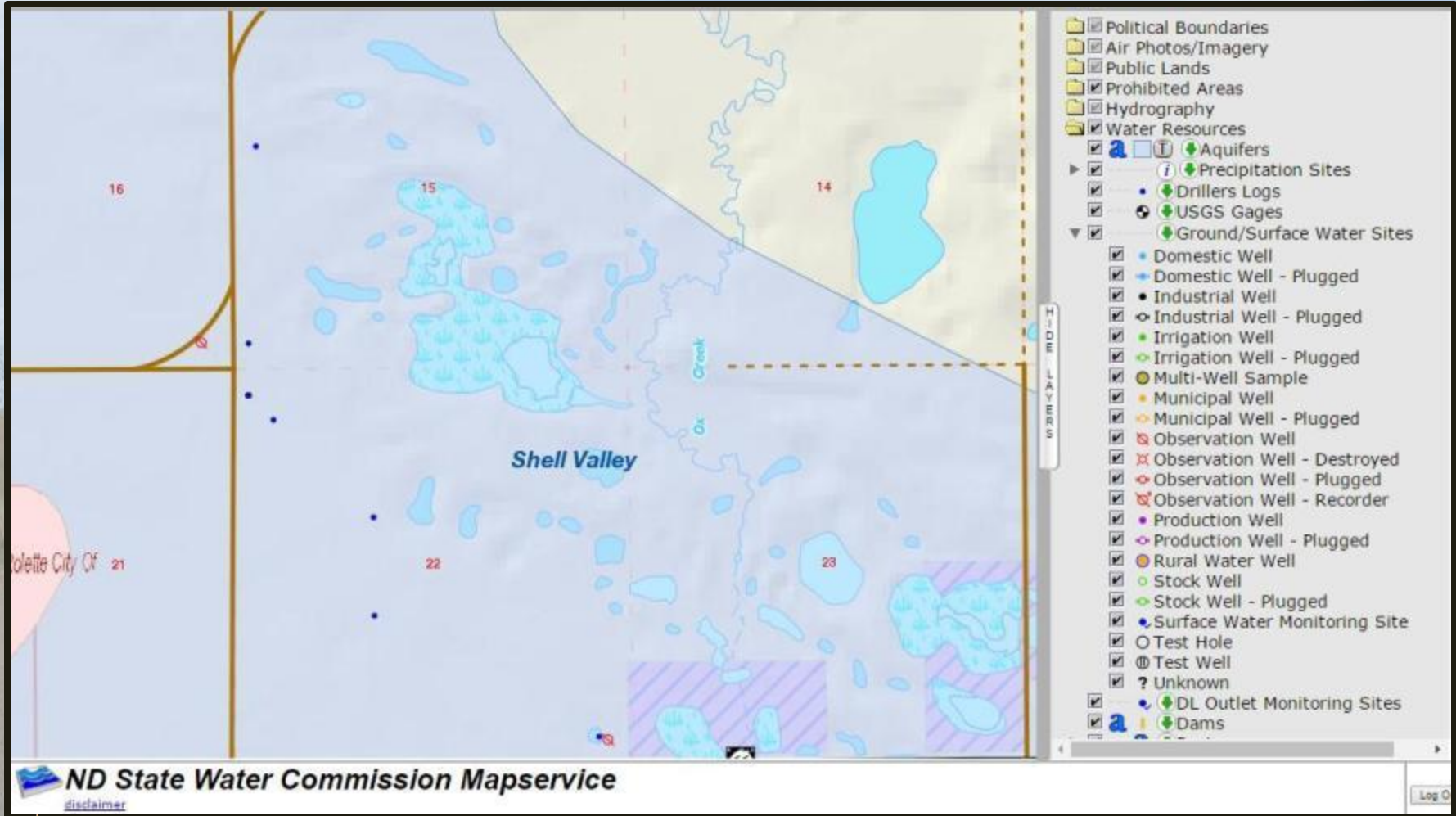
0 2 mi 11 178857 Update Zoom Lat,Long Current Location Recommended Browsers Print Refresh Resize Show Reference Map Log On

<http://mapservice.swc.nd.gov/>



SITE SELECTION TOOLS

ND State Water Commission Mapservice

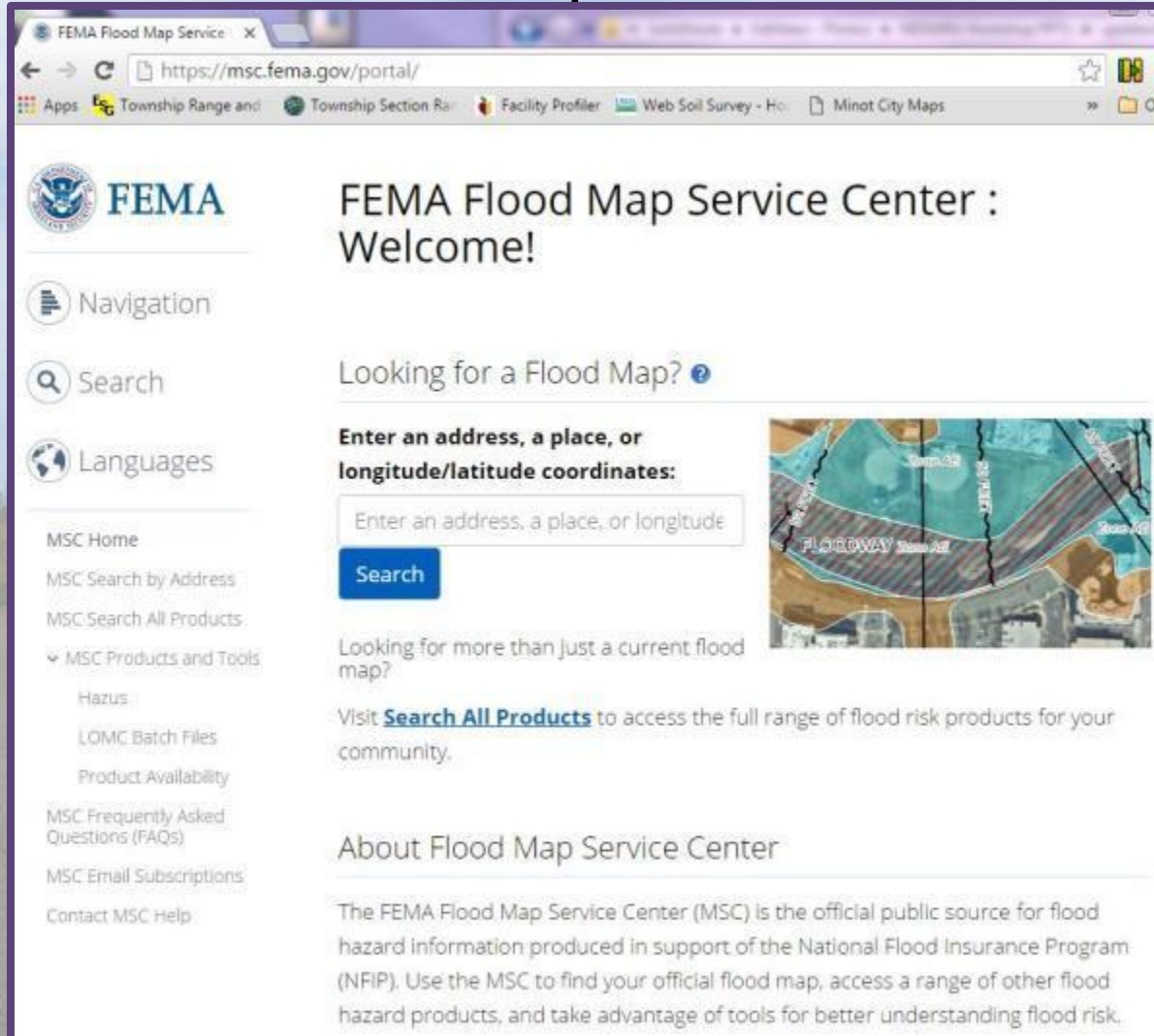


<http://mapservice.swc.nd.gov/>



SITE SELECTION TOOLS

FEMA Flood Map Service Center



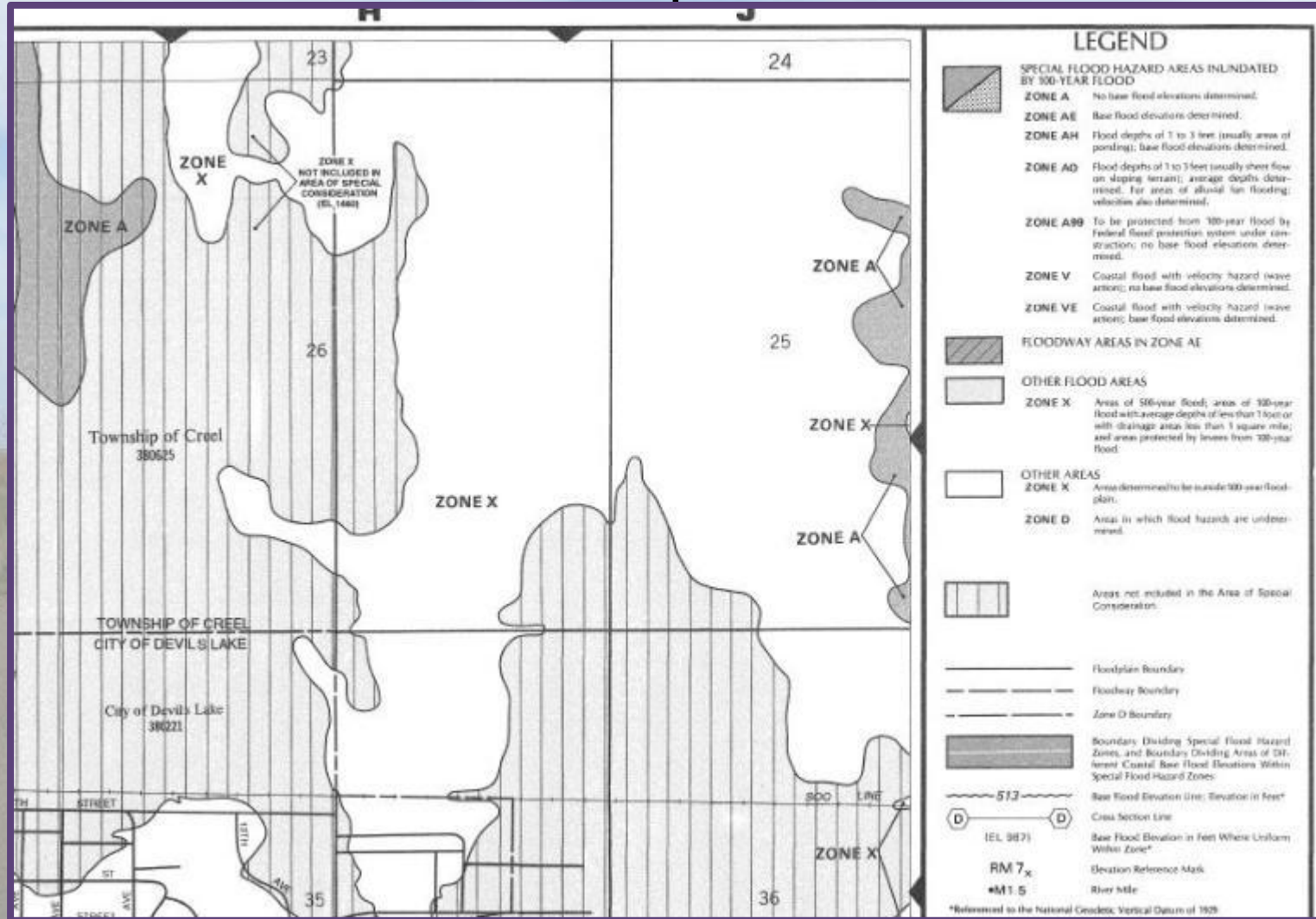
The screenshot shows the FEMA Flood Map Service Center website. The browser address bar displays <https://msc.fema.gov/portal/>. The page features the FEMA logo and a navigation menu on the left with options for Navigation, Search, and Languages. The main content area includes a search bar with the text "Enter an address, a place, or longitude/latitude coordinates:" and a "Search" button. Below the search bar, there is a link to "Search All Products" and a section titled "About Flood Map Service Center" which states: "The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk." A small map thumbnail is visible on the right side of the page.

<https://msc.fema.gov/portal/>



SITE SELECTION TOOLS

FEMA Flood Map Service Center



<https://msc.fema.gov/portal/>



SITE SELECTION TOOLS

Web Soil Survey

The screenshot displays the Web Soil Survey interface. At the top, there are navigation tabs: "Area of Interest (AOI)", "Soil Map", "Soil Data Explorer", "Download Soils Data", and "Shopping Cart (Free)". The main interface is divided into a left sidebar and a central map area.

Left Sidebar:

- Search**
- Area of Interest**: Includes "Open All" and "Close All" buttons.
- AOI Properties**: Includes a "Clear AOI" button.
- AOI Information**:
 - Name: [Text Input Field]
 - Map Unit Symbols: Use Soil Survey Area Map Unit Symbols, Use National Map Unit Symbols
 - Area (acres): 2,586
- Soil Data Available from Web Soil Survey**:
 - Rolette County, North Dakota (ND079)**
 - Data Availability: Tabular and Spatial, complete
 - Tabular Data: Version 15, Sep 25, 2015
 - Spatial Data: Version 4, Dec 31, 2013
- Buttons: "Clear AOI", "Import AOI", "Export AOI"
- Quick Navigation**:
 - Address: [Text Input Field]
 - View [?] button

Central Map Area:

- Area of Interest Interactive Map**: Includes a legend, navigation tools, and a "View Extent" dropdown set to "Contiguous U.S.". The scale is "not to scale".
- The map shows a satellite-style view of a rural area with a large green hatched rectangle indicating the selected Area of Interest (AOI). The map includes labels for "Rolette" and "12th St".
- A scale bar at the bottom left of the map indicates 0 to 3,000 feet.



<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

SITE SELECTION TOOLS

F38A—Arveson fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2q3w1
Elevation: 950 to 2,530 feet
Mean annual precipitation: 15 to 23 inches
Mean annual air temperature: 36 to 43 degrees F
Frost-free period: 110 to 150 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Arveson and similar soils: 71 percent
Minor components: 29 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arveson

Setting

Landform: Depressions on lake plains, outwash plains, flats on lake plains
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave, linear
Parent material: Glaciolacustrine deposits and/or glaciofluvial deposits

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bkg1 - 8 to 14 inches: fine sandy loam
Bkg2 - 14 to 38 inches: fine sandy loam
Cg1 - 38 to 47 inches: loamy fine sand
Cg2 - 47 to 79 inches: fine sand

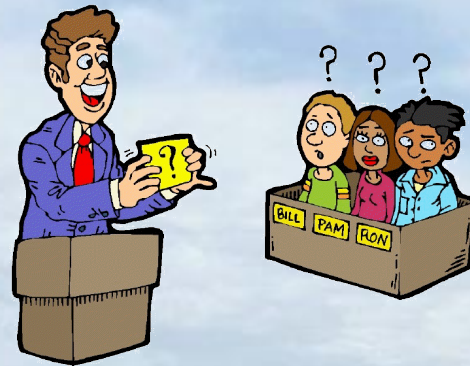
Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 14.17 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: Rare
Calcium carbonate, maximum in profile: 35 percent
Gypsum, maximum in profile: 3 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 5.0
Available water storage in profile: Moderate (about 7.8 inches)

← Sample
Web Soil Survey



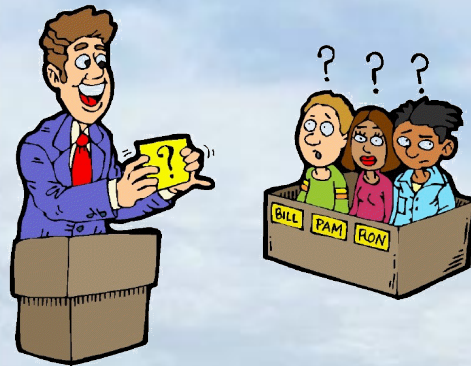
Quiz Question!



What is the name of the online tool where you can check the properties of the soils at a certain location?



Quiz Question!



Is an unused ravine off of usable farmland a good place for a landfill?



Inert Waste Landfills

The Department has established two categories for operation of inert waste landfills.

- Permit by Rule provision
- Inert waste landfill permit



“Do I need to fill out the permit app. Or the PBR Form?”




Is it a municipality servicing a population of 1,000 or less people? **If so then fill out the PBR Notification.**

Is it a Community of 1,000+ people or commercial entity? **If so then fill out the permit application.**



The PBR Notification

- Only for municipalities
- 5 pages long
- 8 different sections

	PERMIT-BY-RULE NOTIFICATION	Telephone: 701-328-5166	FOR STATE USE ONLY	
	NORTH DAKOTA DEPARTMENT OF HEALTH DIVISION OF WASTE MANAGEMENT SFN 19534 (3-2007)	Fax Number: 701-328-5200 Website: www.ndhealth.gov/wm	Facility ID Number	
			<input type="button" value="Clear Fields"/>	
<p>The North Dakota Solid Waste Management Rules, NDAC 33-20, provide a Permit-by-Rule process for certain small solid waste facilities that are operated in compliance with the state solid waste rules. For this notification, please check the type of facility below:</p>				
<input type="checkbox"/> Inert Waste Landfill operated for municipalities servicing populations of less than one thousand (1,000)				
<input type="checkbox"/> Drop Box Facility (such as for rural collection facilities)				
<input type="checkbox"/> Waste Pile for composting grass and leaves operated for ten thousand (10,000) or fewer people				
<input type="checkbox"/> Scrap Tire Pile - a tire dealer, a municipality, or a county may accumulate a pile which contains either 1300 or fewer tires or the equivalent in volume to one twin-axle semitrailer-load or less.				
<p>Please complete all applicable sections of this form and include copies of each required map and drawing. Please keep copies of all information for your records and for use by site operating personnel. Refer to the North Dakota Solid Waste Management Rules, NDAC 33-20 (pertinent sections are attached), and any pertinent (Department) Guidelines for additional information concerning site selection and facility operation.</p>				
1. Background Information				
Property Owner:			Business Telephone Number	
Contact Person:			Home Telephone Number	
Address:		City:	State:	Zip Code:
Legal Description of Site:				
1/4 of	1/4 of	1/4 of	Section:	Township:
Range:		Township Name:		
County:			Total Number of Acres in Site:	
Facility Operator(s):			Business Telephone Number	
			Home Telephone Number	
Address:		City:	State:	Zip Code:
Area(s) from which solid waste will be accepted:				
Projected Lifetime of Facility:				
Have there been past waste disposal activities at the proposed site?				
<input type="checkbox"/> No <input type="checkbox"/> Yes, please explain:				



The PBR Notification

Choose the appropriate box, in this case, Inert Waste Landfill

The North Dakota Solid Waste Management Rules, NDAC 33-20, provide a Permit-by-Rule process for certain small solid waste facilities that are operated in compliance with the state solid waste rules. For this notification, please check the type of facility below:

- Inert Waste Landfill** operated for municipalities servicing populations of less than one thousand (1,000)
- Drop Box Facility** (such as for rural collection facilities)
- Waste Pile for composting grass and leaves** operated for ten thousand (10,000) or fewer people
- Scrap Tire Pile** - a tire dealer, a municipality, or a county may accumulate a pile which contains either 1300 or fewer tires or the equivalent in volume to one twin-axle semitrailer-load or less



The PBR Notification

Fill out owner, address, legal description, and type of waste you'll be accepting.

NOTE: legal description can be obtained by visiting:
<http://www.earthpoint.us/Townships.aspx> and viewing via Google Earth.

1. Background Information

Property Owner:			Business Telephone Number
Contact Person:			Home Telephone Number
Address	City	State	Zip Code

Legal Description of Site:

1/4 of	1/4 of	1/4 of	Section:	Township:
Range:	Township Name:			
County:			Total Number of Acres in Site:	

Facility Operator(s):			Business Telephone Number
			Home Telephone Number
Address	City	State	Zip Code

Area(s) from which solid waste will be accepted:

Projected Lifetime of Facility:

Have there been past waste disposal activities at the proposed site?

No Yes, please explain:

SFN 19534 (3-2007)
Page 2 of 5

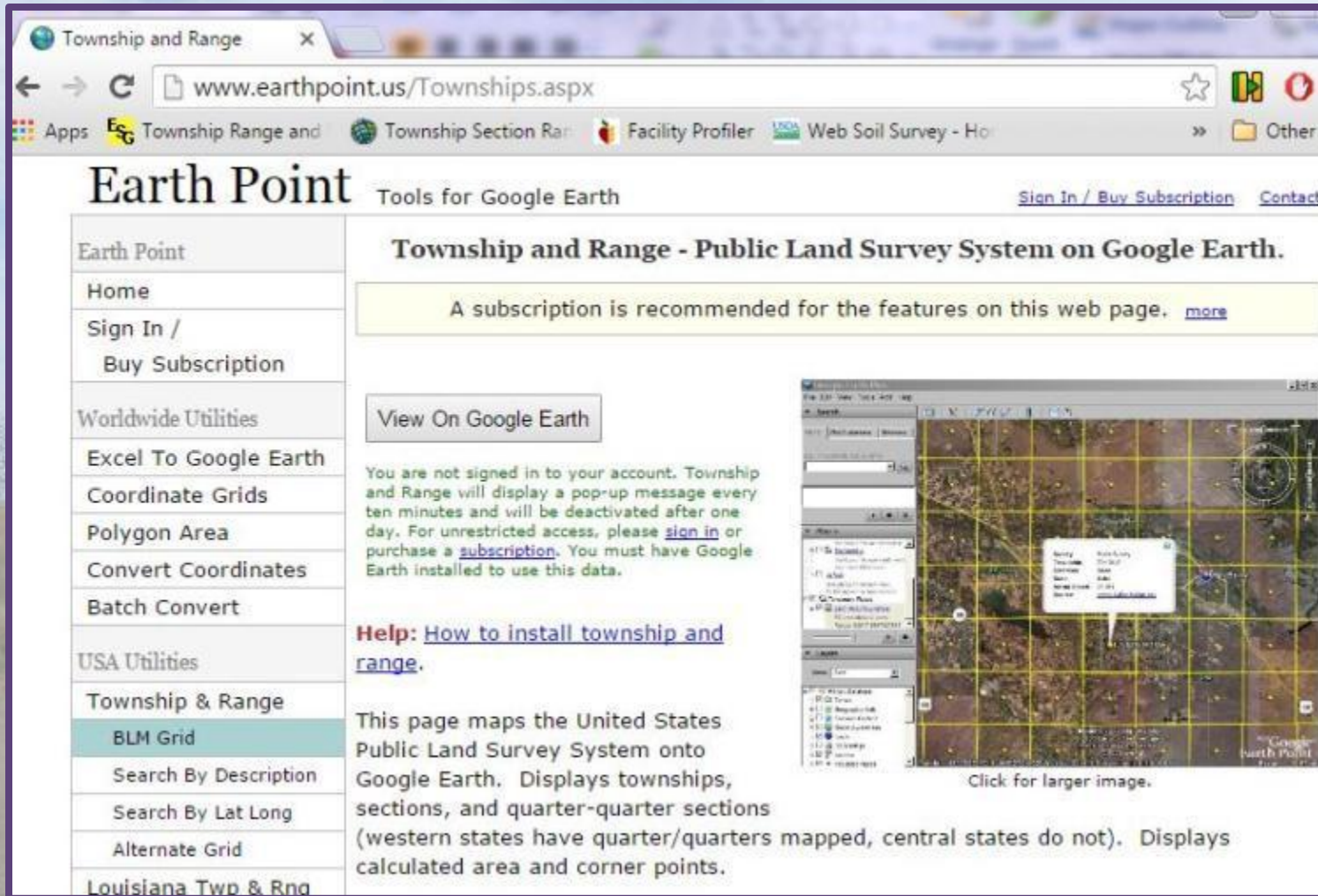
For Inert Waste Landfills or Drop Box Facilities - Indicate Types of Waste Deposited at Site:

<input type="checkbox"/> Construction and/or demolition	<input type="checkbox"/> White goods (stockpiled for recycling)
<input type="checkbox"/> Grass, brush and tree trimmings	<input type="checkbox"/> Lime sludge
<input type="checkbox"/> Tires	<input type="checkbox"/> Other:

Types of equipment used at site:



The PBR Notification



The screenshot shows a web browser window with the URL www.earthpoint.us/Townships.aspx. The page title is "Earth Point Tools for Google Earth". A yellow notification box at the top right states: "A subscription is recommended for the features on this web page. [more](#)". Below this, there is a "View On Google Earth" button. The main content area contains a message: "You are not signed in to your account. Township and Range will display a pop-up message every ten minutes and will be deactivated after one day. For unrestricted access, please [sign in](#) or purchase a [subscription](#). You must have Google Earth installed to use this data." Below this message is a "Help: [How to install township and range.](#)" link. The bottom section of the page is titled "This page maps the United States Public Land Survey System onto Google Earth. Displays townships, sections, and quarter-quarter sections (western states have quarter/quarters mapped, central states do not). Displays calculated area and corner points." On the right side of the page, there is a small inset image showing a Google Earth map with a yellow grid overlay. A tooltip is visible over one of the grid cells, displaying data such as "Name", "Section", "Township", "Range", "Area", and "Corner Points". Below the inset image is the text "Click for larger image." The left sidebar of the website lists various utility categories: "Earth Point" (Home, Sign In / Buy Subscription), "Worldwide Utilities" (Excel To Google Earth, Coordinate Grids, Polygon Area, Convert Coordinates, Batch Convert), "USA Utilities" (Township & Range, BLM Grid, Search By Description, Search By Lat Long, Alternate Grid, Louisiana Twp & Rng).

<http://www.earthpoint.us/Townships.aspx>
and viewing via Google Earth.



The PBR Notification

The screenshot shows the Google Earth interface with a township grid overlay. A pop-up window provides the following information:

Section	S17 T153N R78W
Meridian	Fifth
State	North Dakota
Source	BLM
GLO	GLO Township Records
Calculated Values	
Acres	645
Centroid	48.0731562, -100.7233261
Corners	NW48.0803675, -100.7341905
	NE 48.0804175, -100.7124110
	SE 48.0659283, -100.7125275
	SW48.0658630, -100.7341610
Quarters	This section has 16 quarter/quarters plotted.
For illustration only. User to verify all information. www.earthpoint.us	

<http://www.earthpoint.us/Townships.aspx>
and viewing via Google Earth.



The PBR Notification

- Soil survey maps can be viewed and printed here:
- <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- Topographic maps can be viewed and printed at the websoil survey under the Legend tab.
- County road maps and aerial photos can be viewed and printed at: <http://maps.google.com>

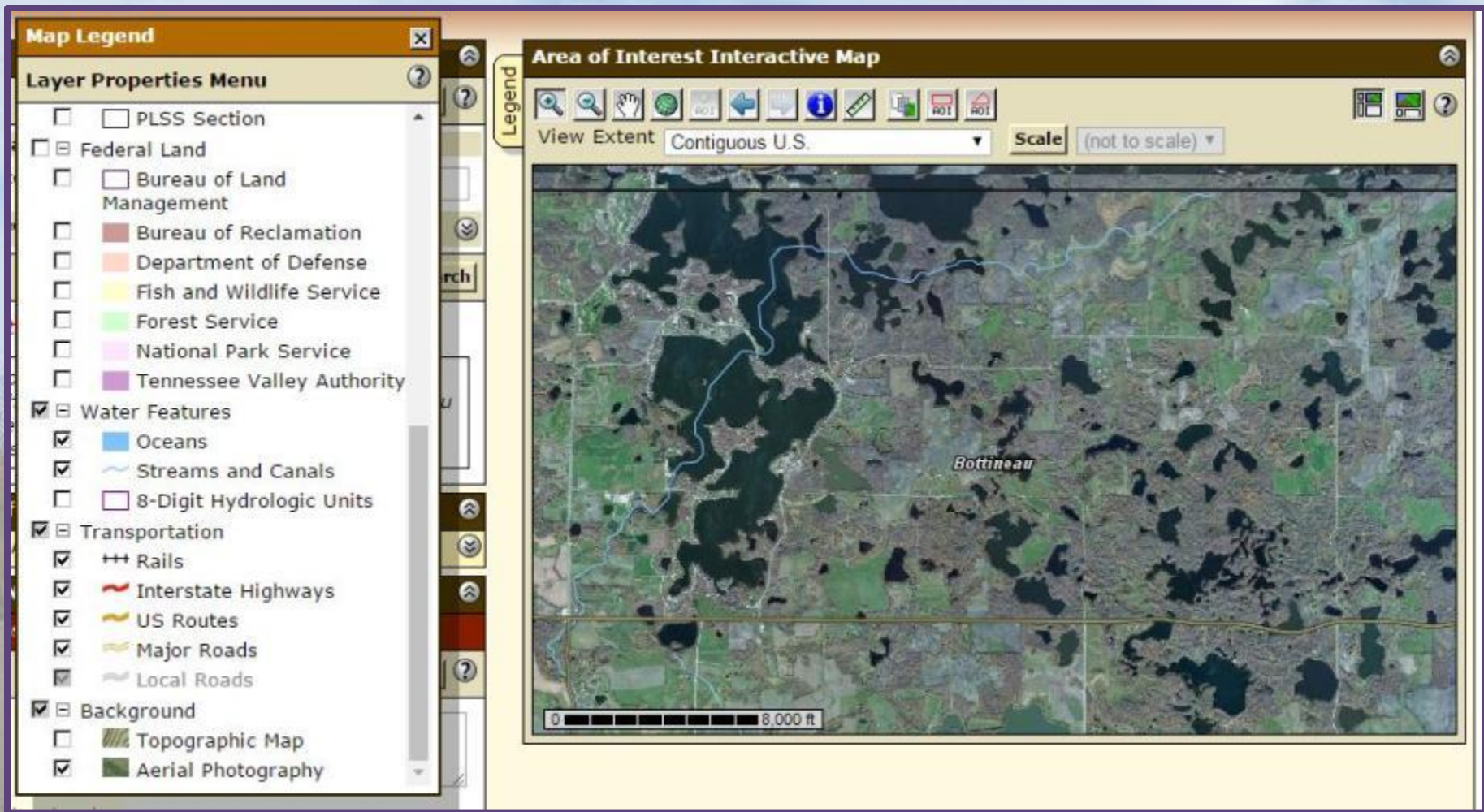
2. Figures and Maps

Include the following maps and information, with the site delineated in red pencil, to help in assessing the site and soil characteristics (this information should be available from local Natural Resources Conservation Service/NRCS and Agricultural Stabilization and Conservation Service/ASCS offices): **Please check:**

- Copy of county soil survey map (if the county has been mapped) or other appropriate soil details with copies of the interpretation sheets
- Topographic map with exact landfill location marked
- County road map of area with site location marked
- Large scale aerial photo - available from ASCS



The PBR Notification

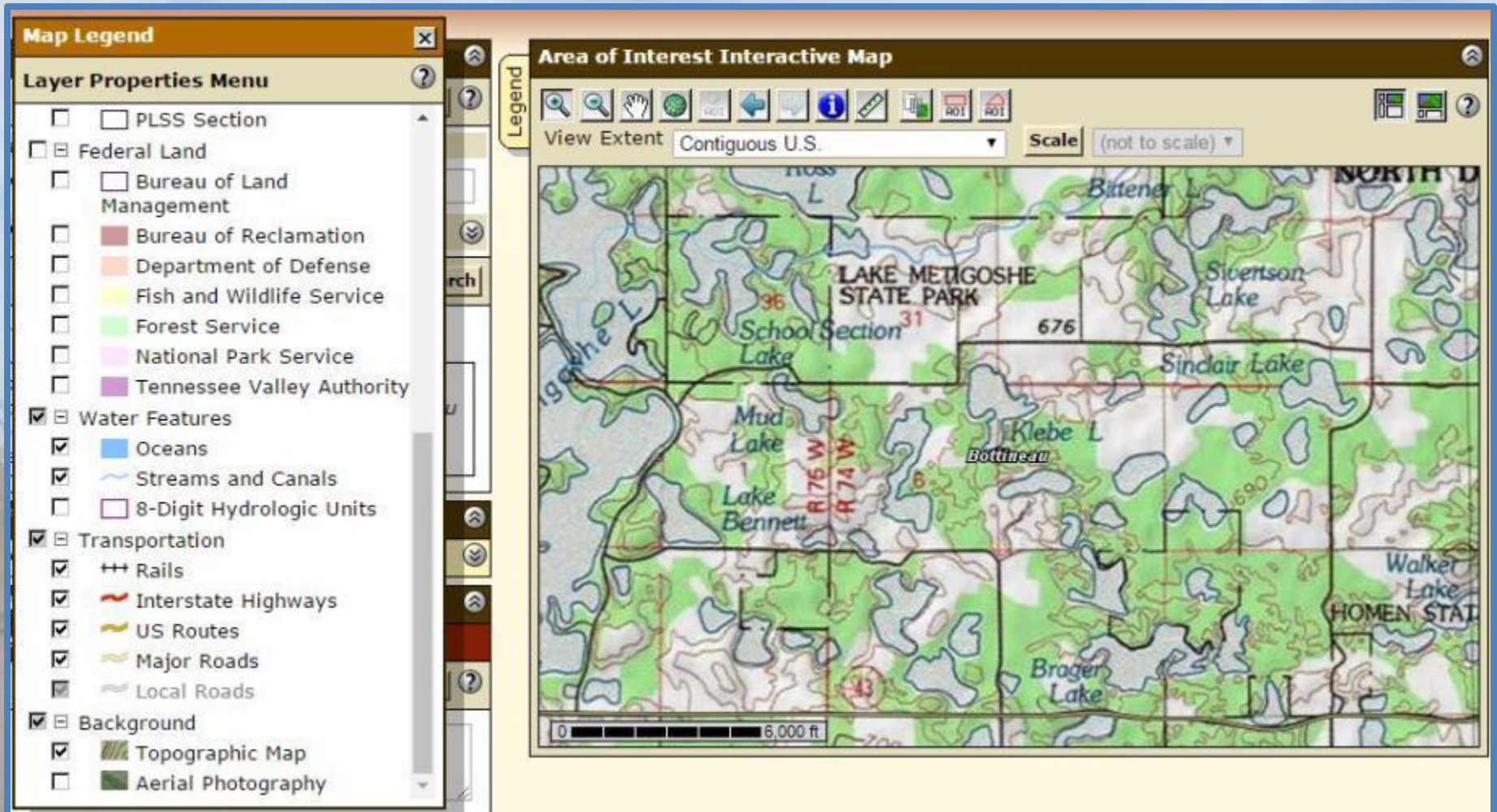


Topographic maps:

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>



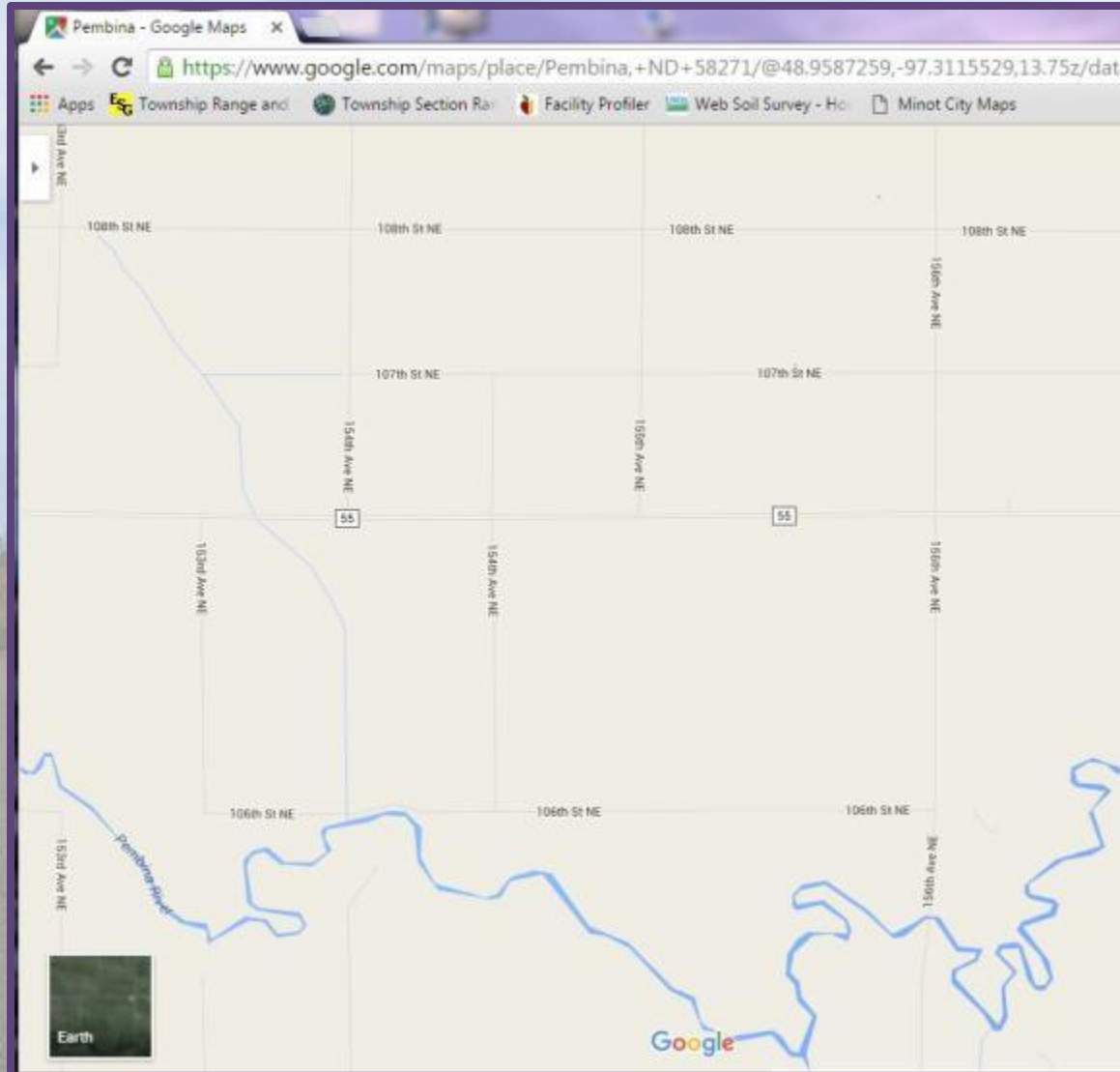
The PBR Notification



Topographic maps:

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

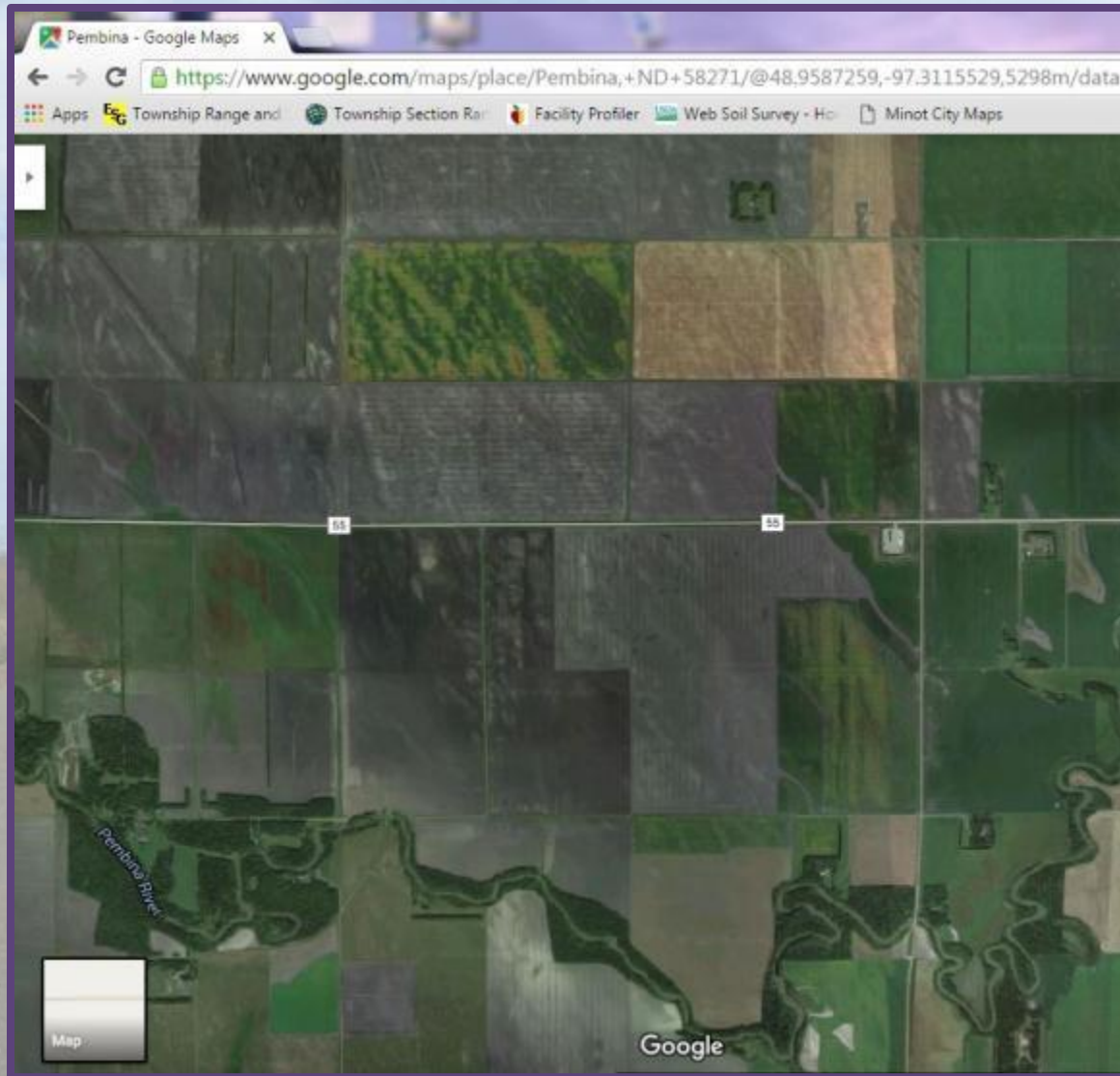
The PBR Notification



Road Maps: maps.google.com



The PBR Notification



Road Maps: maps.google.com



The PBR Notification

Most of this information can be found on the soil survey link from the previous page.

3. Site and Soil Characteristics

Site Slope (percent):	Distance to surface Water:	<input type="checkbox"/> Feet <input type="checkbox"/> Miles	Distance to Nearest Building or Residence (feet):	Depth to Water Table (feet):
Soil Type: <input type="checkbox"/> Sand <input type="checkbox"/> Loam <input type="checkbox"/> Clay	Location of Nearest Wells:			Depth of Wells:

Well information can be located at this website:

<http://mapservice.swc.nd.gov/>



The PBR Notification

Most if not all of these should be checked:

4. Compliance with Waste Management Rules - Please check:

<input type="checkbox"/> Population served: less than 1,000 for inert waste	<input type="checkbox"/> Prohibit disposal of liquids
<input type="checkbox"/> Population served: less than 10,000 for compost pile	<input type="checkbox"/> Stockpile topsoil (for landfills and compost sites)
<input type="checkbox"/> Permanent sign	<input type="checkbox"/> Access control (locked gate and fence)
<input type="checkbox"/> Record of notice with County Register of Deeds (for landfills)	<input type="checkbox"/> Prohibit open burning
<input type="checkbox"/> All-weather access road	

Are there any easements on the property? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are local zoning and health officials knowledgeable of the facility and the practices to be employed at the site? (List of local Health Districts attached.) <input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

Check with the local zoning authority.



The PBR Notification

If you have a small scrap tire pile, these should be checked “yes”:

5. For Small Scrap Tire Piles:			
Is the access controlled (locked gate and fence)? <input type="checkbox"/> Yes <input type="checkbox"/> No		Does the site have provisions to control insects and vermin? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is location accessible by fire control and emergency equipment? Describe provisions. <input type="checkbox"/> Yes <input type="checkbox"/> No			
Name of Local Fire Contact			Telephone Number
Address	City	State	Zip Code
Describe where tires or scrap rubber will be transported to for recycling or disposal			

Check with the county or city for the local fire contact



The PBR Notification

6. Site Development, Operation and Closure Plans - Please check:

Include appropriate facility development, operation and closure plans or drawings as well as supporting narrative (check all that are enclosed) including:

- Facility fences, gates, signs, roads, adjacent land features (including wetlands or drainage features), etc.
- Projected areas to be used for waste management during the facility life
- Location of pertinent waste management features including trenches and wood burn areas (for landfills), compost pads or areas, recyclable material stockpiles, tire piles, drop box or dumpster locations, etc.
- Stockpile areas for Suitable Plant Growth Material (SPGM - normally the soil A and upper B layers)
- Stockpile areas for soil cover material (for landfills)
- Recycling or disposal of tires and/or recycling of other materials
- Site closure plans, diagrams and revegetation seed mix

What equipment will be readily available for site operation and closure?

Who will have the key(s) for the facility so as to control access to the site?

A good hand drawn map could be acceptable for the above items.



The PBR Notification

7. Local Zoning Approval - Please check:

The owner/operator of any solid waste management facility should make sure the facility is in accordance with any local zoning and Health District requirements. Does the site identified in this application meet the requirements of any local zoning (county, township, city, etc.) and Health District jurisdiction in the area of the facility?

Yes No

- Check with your local city, county, and/or township on any zoning rules that may apply.

- Local Public Health unit contacts can be found here:

<https://www.ndhealth.gov/localhd/>



The PBR Notification

Make sure to fill out
and sign!

Mail to the address
at the bottom.

8. Owner's/Operator's Signature/Certification

Owners/operators of Permit-by-Rule facilities must comply with applicable North Dakota Waste Management Rules including:

1. Section 33-20-02.1-02 Permits-by-Rule;
2. Section 33-20-02.1-04 Record of Notice for Landfills;
3. Section 33-20-04.1-01 General Location Standards;
4. Section 33-20-04.1-02 General Facility Standards;
5. Section 33-20-04.1-05 General Closure Standards;
6. Section 33-20-04.1-06 Drop Box Facilities;
7. Section 33-20-04.1-07 Piles (Compost or Tires) Used for Storage or Treatment;
8. Section 33-20-04.1-09 General Disposal Standards;
9. Section 33-20-05.1 Inert Waste Landfills; and
10. Section 33-20-13 Water Protection Provisions.

Name
Name of Facility:

I, the above-named certify the Permit-By-Rule facility will be operated in compliance with the rules and regulations listed above.

Signature	Date		
Title	Telephone Number		
Address	City	State	Zip Code

Prepared by:

Signature	Date		
Title	Telephone Number		
Address	City	State	Zip Code

Mail to: North Dakota Department of Health
Division of Waste Management
918 E. Divide Ave. 3rd Floor
Bismarck, ND 58501-1947


NOTE: PLEASE RETAIN COPIES FOR YOUR RECORDS AND FOR FACILITY OPERATING PERSONNEL.



The Application

4 pages long

24 different sections

 **APPLICATION FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT**
NORTH DAKOTA DEPARTMENT OF HEALTH
DIVISION OF WASTE MANAGEMENT
SFN 15069 (4-2010)

1. GENERAL INFORMATION

Facility Name		Permit Number	Application Date	Telephone Number
Physical Address		City	State	Zip Code
Mailing Address		City	State	Zip Code
Geographic Location	Section	Township	Range	County
Latitude and Longitude (degrees, minutes, and seconds)				
ID Number Assigned to organization by the ND Secretary of State		State under which your organization is organized		Is registration with the Secretary of State required? (701) 228-4284 <input type="checkbox"/> No <input type="checkbox"/> Yes

2. FACILITY TYPE

Application for What Type of Facility

<input type="checkbox"/> Inert Waste Landfill	<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Transfer Station	<input type="checkbox"/> Waste Pile (for example, tire piles more than 800 lines, yard waste compost piles serving more than 10,000 people)
<input type="checkbox"/> Municipal Waste Landfill	<input type="checkbox"/> Land Treatment Facility	<input type="checkbox"/> Putrescible Waste	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Industrial Waste Landfill	<input type="checkbox"/> Solid Waste Processing	<input type="checkbox"/> Other Waste	
<input type="checkbox"/> Special Waste Landfill	<input type="checkbox"/> Treatment or Resource Recovery Facilities		

3. APPLICANT INFORMATION

Name of Applicant		Telephone Number	Fax Number
Address		City	State Zip Code
Is Applicant a Political Subdivision? <input type="checkbox"/> No <input type="checkbox"/> Yes	If the applicant is not a political subdivision in the state of North Dakota, please enclose appropriate information to describe any sole ownership, partnership, corporation, etc. Please include a description of the major stockholders of any corporate entity, the membership of the board of directors, a copy of the articles of incorporation, and any other information necessary to describe the legal status of the applicant. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes		
Is Applicant a Private Entity, Partnership, Corporation, etc.? <input type="checkbox"/> No <input type="checkbox"/> Yes			
4. Surveyed Land Description: The applicant must provide a formal surveyed description of the proposed facility signed by a Registered Land Surveyor in the state of North Dakota and formally identify the facility boundaries. The applicant must demonstrate that he either owns the property and has legal access to it or show that he has a formal lease or rental agreement signed by the property owner showing approval and access to use the site as a solid waste facility.			
Is Survey Description of Property Attached? <input type="checkbox"/> No <input type="checkbox"/> Yes	Name of Property Owner		Telephone Number
Address		City	State Zip Code
Is a Certified Copy of the Deed Showing Property Ownership Enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes	If the property is not owned by the operator, is a copy of the lease, rental agreement, or other documentation signed by the property owner showing approval to use the site as a solid waste facility enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes		

5. Easements or Encumbrances: A description of any easements around the property must be provided. This would include a location and a copy of any above ground or underground pipelines or transmission line easements, wetland easements, etc. The location of all such facilities and easements must be clearly identified on appropriate maps and legal descriptions attached to this application.

Does the applicant have clear and unencumbered access to the property to be used as a solid waste management facility? <input type="checkbox"/> No <input type="checkbox"/> Yes	Is information on any easements or access stipulations enclosed with this application? <input type="checkbox"/> No <input type="checkbox"/> Yes
Total acreage of proposed site	Acreage usable for solid waste management activities as described in plans

6. General Site Information: To help the Department assess the suitability of the facility, general site information and maps must be provided with the application. At a minimum, the following information with the proposed facilities clearly defined should be enclosed with the application.

Topographic map of the area (USGS) <input type="checkbox"/> No <input type="checkbox"/> Yes	Map depicting area drainage and surface water flow patterns <input type="checkbox"/> No <input type="checkbox"/> Yes	Aerial photographs of the site <input type="checkbox"/> No <input type="checkbox"/> Yes	County road map of the area <input type="checkbox"/> No <input type="checkbox"/> Yes
Land ownership map of the area (county atlas) <input type="checkbox"/> No <input type="checkbox"/> Yes	Other information		



The Application

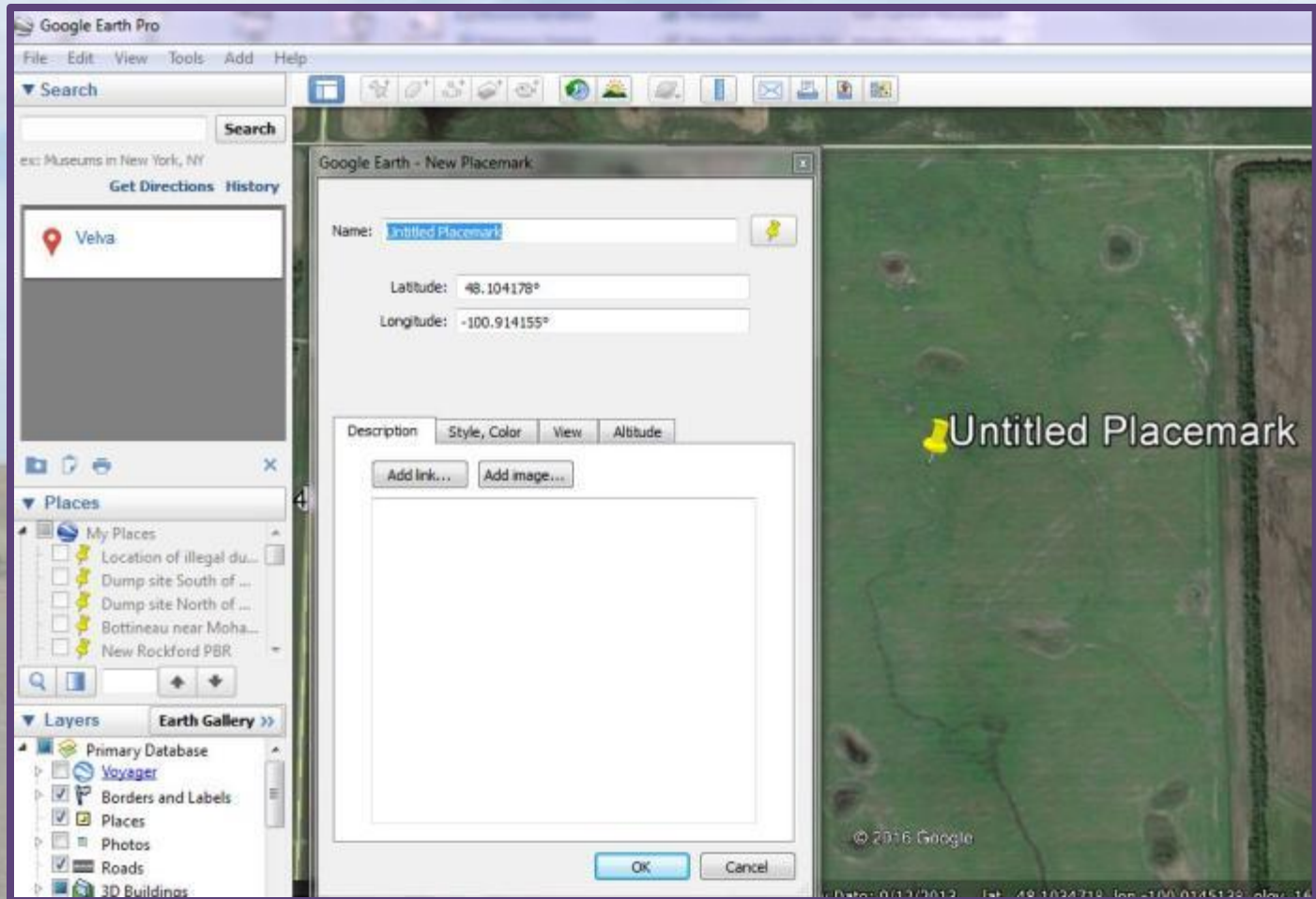
1. GENERAL INFORMATION

Facility Name			Permit Number	Application Date	Telephone Number
Physical Address			City	State	Zip Code
Mailing Address			City	State	Zip Code
Geographic Location	Section	Township	Range	County	
Latitude and Longitude (degrees, minutes, and seconds)					
ID Number Assigned to Organization by the ND Secretary of State			State under which your organization is organized	Is registration with the Secretary of State required? (701) 328-4284 <input type="checkbox"/> No <input type="checkbox"/> Yes	

- Township/Section/Range can be found at:
<http://www.earthpoint.us/Townships.aspx> and viewing via Google Earth.
- Lat/long can be found in Google Earth – click the pushpin for “new placement” and place on the location of the proposed facility
- Secretary of State business search is at:
<https://apps.nd.gov/sc/busnsrch/busnSearch.htm>



The Application



The Application

2. FACILITY TYPE

Application for What Type of Facility

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Inert Waste Landfill | <input type="checkbox"/> Surface Impoundment | <input type="checkbox"/> Transfer Station | <input type="checkbox"/> Waste Pile (for example, tire piles more than 800 tires; yard waste compost piles serving more than 10,000 people) |
| <input type="checkbox"/> Municipal Waste Landfill | <input type="checkbox"/> Land Treatment Facility | <input type="checkbox"/> Putrescible Waste | |
| <input type="checkbox"/> Industrial Waste Landfill | <input type="checkbox"/> Solid Waste Processing | <input type="checkbox"/> Other Waste: _____ | |
| <input type="checkbox"/> Special Waste Landfill | <input type="checkbox"/> Treatment or Resource Recovery Facilities | <input type="checkbox"/> Other (Specify) _____ | |

Choose the type of facility that is being proposed



The Application

3. APPLICANT INFORMATION

Name of Applicant		Telephone Number		Fax Number	
Address		City		State	Zip Code
Is Applicant a Political Subdivision? <input type="checkbox"/> No <input type="checkbox"/> Yes		If the applicant is not a political subdivision in the state of North Dakota, please enclose appropriate information to describe any sole ownership, partnership, corporation, etc. Please include a description of the major stockholders of any corporate entity, the membership of the board of directors, a copy of the articles of incorporation, and any other information necessary to describe the legal status of the applicant. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes			
Is Applicant a Private Entity, Partnership, Corporation, etc.? <input type="checkbox"/> No <input type="checkbox"/> Yes					
4. Surveyed Land Description: The applicant must provide a formal surveyed description of the proposed facility signed by a Registered Land Surveyor in the state of North Dakota and formally identify the facility boundaries. The applicant must demonstrate that he either owns the property and has legal access to it or show that he has a formal lease or rental agreement signed by the property owner showing approval and access to use the site as a solid waste facility.					
Is Survey Description of Property Attached? <input type="checkbox"/> No <input type="checkbox"/> Yes		Name of Property Owner		Telephone Number	
Address		City		State	Zip Code
Is a Certified Copy of the Deed Showing Property Ownership Enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes		If the property is not owned by the operator, is a copy of the lease, rental agreement, or other documentation signed by the property owner showing approval to use the site as a solid waste facility enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes			

Contact registered land surveyor for survey map



The Application

5. Easements or Encumbrances: A description of any easements around the property must be provided. This would include a description and a copy of any above ground or underground pipeline or transmission line easements, right-of-way easements, wetland easements, etc. The location of all such facilities and easements must be clearly identified on appropriate maps and legal descriptions attached to this application.

Does the applicant have clear and unencumbered access to the property to be used as a solid waste management facility? No Yes

Is information on any easements or access stipulations enclosed with this application? No Yes

Total acreage of proposed site

Acreage usable for solid waste management activities as described in plans

Check with the local zoning authority



The Application

6. General Site Information: To help the Department assess the suitability of the facility, general site information and maps must be provided with the application. At a minimum, the following information with the proposed facilities clearly defined should be enclosed with the application.

Topographic map of the area (USGS) <input type="checkbox"/> No <input type="checkbox"/> Yes	Map depicting area drainage and surface water flow patterns <input type="checkbox"/> No <input type="checkbox"/> Yes	Aerial photographs of the site <input type="checkbox"/> No <input type="checkbox"/> Yes	County road map of the area <input type="checkbox"/> No <input type="checkbox"/> Yes
Land ownership map of the area (county atlas) <input type="checkbox"/> No <input type="checkbox"/> Yes	Other Information		

- Topographic maps can be viewed and printed here: <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- County road maps and aerial photos can be viewed and printed at: <http://maps.google.com>
- Check with the city or county for land ownership maps



The Application

7. No Pre-app for inerts

8. WH Permits

11. Compost/white goods destination?

12. NDAC rules can be found here:

<http://www.legis.n.d.gov/information/acdata/html/33-20.html>

<p>7. Preapplication: For new or lateral expansion of land treatment units, surface impoundments closed with waste in place, municipal waste landfills, industrial waste landfills, and special waste landfills, has a preapplication assessment of the proposed site been approved? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	
<p>8. Facility Access and Hauling: Please enclose any maps and supporting narrative identifying the suitability and adequacy of roads and bridges used as access routes to support loaded vehicles. Also indicate the modes of transportation and the waste haulers. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	
<p>9. Compliance History: Please enclose an accurate description of the compliance history of the permit applicant. Include any identified violations of the North Dakota Solid Waste Management Rules and/or any violations of state or federal rules at any other facilities or through any activities engaged in by the applicant. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	
<p>10. Waste Information: The application must include a description of the nature and quantity of materials or wastes proposed to be handled, processed, stored, or disposed during the period of the permit along with an identification of the generators (industries, businesses, municipalities, individuals, and populations) to be served by the proposed facility. As necessary, waste characterization and waste acceptance information must be provided.</p>	
<p>11. Disposal, Recycling, Treatment, or Resource Recovery: For a transfer station, solid waste processing, treatment, or resource recovery facility, or a waste pile, the applicant must identify the end use, the location and/or the facility to which the waste will eventually be transferred. The applicant must demonstrate that all solid waste, recycled material, residues, and leachate will be managed at a state approved/permited solid waste facility or at a facility that is in compliance with the regulations of the state, tribal, or federal agency having jurisdiction. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	
<p>12. Compliance with Rules: Permit applicants must include all appropriate information necessary to show how the facility will be in compliance with all state and federal rules and regulations. Appropriate sections of the North Dakota Solid Waste Management Rules that must be addressed include, but are not necessarily limited to, the following:</p>	
<p>Chapter 33-20-01.1 General Provisions. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	<p>Chapter 33-20-02.1 Permit Provisions and Procedures. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>Chapter 33-20-03.1 Permit Application Provisions. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	<p>Date the affidavit from the official county newspaper will be submitted to the Department certifying that the two public notices have been published (see subsection 4, Section 33-20-03.1-02 NDAC).</p>
<p>Chapter 33-20-04.1 General Performance Standards. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>	
<p>Specific facility standards appropriate for the type of facility operation including the following (check those that apply):</p>	
<input type="checkbox"/>	Chapter 33-20-05.1 Inert Waste Landfills.
<input type="checkbox"/>	Chapter 33-20-06.1 Municipal Waste Landfills.
<input type="checkbox"/>	Chapter 33-20-07.1 Industrial Waste Landfills.
<input type="checkbox"/>	Chapter 33-20-08.1 Surface Impoundments.
<input type="checkbox"/>	Chapter 33-20-09 Landfills Treatment Provisions.
<input type="checkbox"/>	Section 33-20-04.1-06 Transfer Stations, Baling and Compaction Systems, Processing Systems, and Drop Box Facilities.
<input type="checkbox"/>	Section 33-20-04.1-07 Piles Used for Storage and Treatment Standards.
<input type="checkbox"/>	Section 33-20-04.1-08 Solid Waste Treatment or Resource Recovery Facilities.
<p>Please refer to the Department's "Quality Assurance Guidelines" for information to be obtained for construction quality assurance and reporting for appropriate facilities. Other guidance information may be available for certain facilities.</p>	



The Application

13. Water Protection: The facility must demonstrate compliance with the General Location Standards of Section 33-20-04.1-01 NDAC and the Water Protection Provisions of Chapter 33-20-13. Please refer to the Department's "Guidelines for Hydrogeologic Investigations of Solid Waste Facilities" and "Guidelines for Corrective Action of Solid Waste Facilities" for additional information and guidance. Is the information to demonstrate compliance enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes	
14. Storm Water Compliance: The facility should demonstrate the ability to properly manage storm water and must demonstrate compliance with the NDPDES storm water permit program. A completed application for an industrial and/or construction permit should be filed for approval thirty (30) days prior to the start of operation. Please refer to the enclosed fact sheet for more information. Has an application been filed? <input type="checkbox"/> No <input type="checkbox"/> Yes	
If no, Specify When an Application Will Be Filed	Is storm water management addressed in the solid waste application? <input type="checkbox"/> No <input type="checkbox"/> Yes
15. Personnel: Enclose a narrative describing the duties, experience, and training of operators and other personnel for the facility. For municipal waste landfills, demonstrate how the facility will be in compliance with the requirements for certification of operators, Chapter 33-20-16 NDAC. Is the information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes	
16. Life of Facility: Describe the estimated life of the facility and attach a description of the method used to calculate this figure. Is the description attached? <input type="checkbox"/> No <input type="checkbox"/> Yes	Estimated Life
17. Site Development: Please enclose a timetable showing the proposed site development schedule for the facility and showing timelines for completing the activities proposed in the permit application. Is the information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes	
Proposed Opening Date of Facility	Proposed Closing Date of Facility

13. A groundwater monitoring program is not required of most inert landfills

14. You will need to contact the Department of Water Quality on stormwater compliance:

<http://www.ndhealth.gov/WQ/Storm/StormWaterHome.htm>



The Application

18. Insurance: Provide the name and address of the insurer of the facility and/or attach a copy of the general liability insurance policy. Provide a statement regarding the limits of the policy for sudden and nonsudden liability coverage. Is a statement of coverage attached? <input type="checkbox"/> No <input type="checkbox"/> Yes			
Name of Insurer		Telephone Number	
Address	City	State	Zip Code
19. Financial Assurance: Please demonstrate how the facility will comply with the financial assurance requirements of Chapter 33-20-14 NDAC. Is the information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes			
20. Local Zoning: Does the site meet the requirements of any local zoning jurisdiction in the area of the facility (county, township, city, etc.)? <input type="checkbox"/> No <input type="checkbox"/> Yes Please enclose a copy of any pertinent local zoning ordinances, maps, and a statement from the local zoning authorities and/or political subdivisions that the use of the property for a solid waste management facility as described in this application is consistent with local zoning and/or permitting ordinances. Please enclose a copy of any required local permits. Is this information enclosed? <input type="checkbox"/> No <input type="checkbox"/> Yes			
21. Are local health officials knowledgeable of the facility and the practices to be employed at the site? <input type="checkbox"/> No <input type="checkbox"/> Yes			
22. Fees: Depending on the type and size of the facility, enclose an appropriate application processing fee and annual permit fee as identified in Chapter 33-20-15. Are the appropriate fees attached? <input type="checkbox"/> No <input type="checkbox"/> Yes			
23. Other Permits: Will any other structures or features be constructed at the site that require any other permits (for example, underground tanks, air pollution sources, etc.)? If yes, please enclose information to show such facilities will be in compliance with state or federal regulations. <input type="checkbox"/> No <input type="checkbox"/> Yes			

18. Provide info. Gen. liability insurance policy

19. Financial assurance is not required of inert landfills

20. Check with local zoning authority

21. Local health information can be found here:

<https://www.ndhealth.gov/localhd/>

22. \$2,000 fee - more than 40 tons a day



The Application

Make sure to
sign and date!
Then mail to
the address
on the bottom.

24. Signatures: A permit application must be signed as follows:

- a. For a corporation, by a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application;
- b. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively;
- c. For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official;
- d. If the operator of the facility for which the application is submitted is different from the owner, by both the owner and the operator according to Items A to C;
- e. For solid waste management facilities, by the facility owner and landowner under Items A to C if the landowner is different from the owner of the facility for which the application is submitted; and
- f. For a firm preparing the necessary reports and plans for a solid waste management facility permit application, by an engineer registered in North Dakota.

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 will manage this system or those persons directly responsible for gathering the information, the information submitted 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.

Owner's Signature		Date Signed
Print Name	Official Title	
Operator's Signature		Date Signed
Print Name	Official Title	
Landowner's Signature		Date Signed
Print Name	Official Title	
Engineer's Signature		Date Signed
Print Name	Registration	

Return this form (and application fee if applicable) to: North Dakota Department of Health
Division of Waste Management
918 E Divide Ave., 3rd Fl.
Bismarck, ND 58501-1947



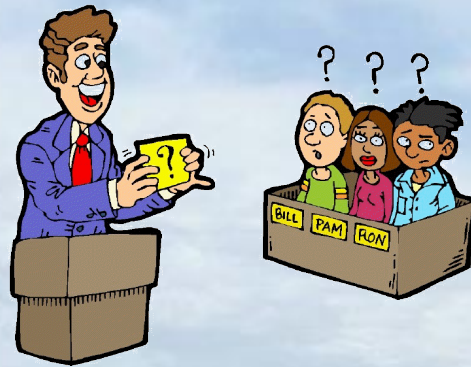
Quiz Question!



If a town of 1,200 people wants to site a landfill, which application do they need to fill out; the PBR form or the permit application?



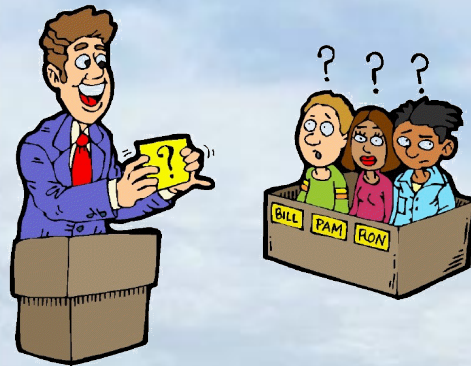
Quiz Question!



Do you want clay rich or sandy soils in an area where you want to place a landfill?



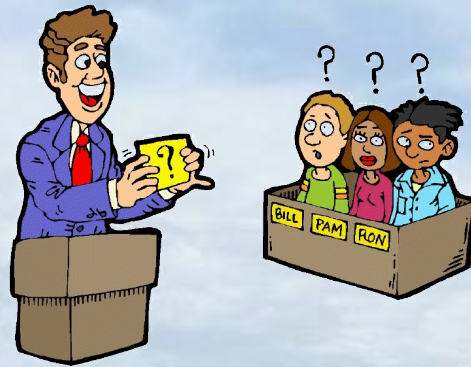
Quiz Question!



Can household garbage be disposed of at an inert waste landfill?



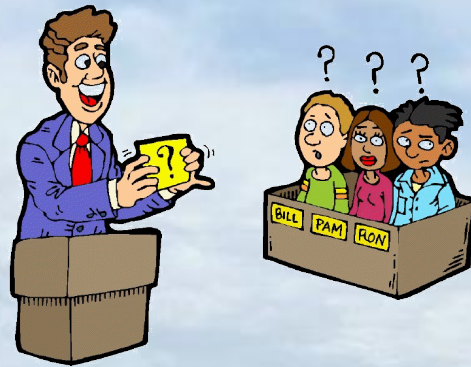
Quiz Question!



Name some different segregated materials you may see at an inert waste landfill.



Quiz Question!



What is allowed in the wood pile at an inert waste landfill if that wood pile is earmarked to be burned?



Any Questions?

