**MONITORING WELL CONSTRUCTION AND DEVELOPMENT DATA SUBMITTLAL FORMAT**

**Working Notes:**

- Create a standard text file, ending with the extension ".txt".
- Name the file starting with "monit_" in lowercase, followed by the facility license and then the date without separators mmddyyyy.
  - E.g. for license 12345 on June 20, 2002 the file would be named "monit_12345_06202002.txt".
- Order the fields in each record in the order specified below and separated by a comma delimiter.
- Max length of each field is specified below.
- In the case of a null value field just add a comma, in the correct position, to the record. A record consists of all fields defined below. A subset of the fields won't be accepted by the upload program.
- All fields can support null values.
  - **Exception:** Either a **Wi_unique_well_no**, ***OR*** a **Facility_license_no & Dnr_well_id** combination, is required.
- If a field has a comma within the value, enclose the whole value in double quotes.
- Enter dates in MMDDYYYY format.
- Enter numbers without leading zeroes.
- Decimal places allowed in numbers. For example NUMBER(6,3) will allow a value 999.999
- Data types are standard Oracle data types.
- Once files are prepared, email them as and attachment to GEMS@dnr.state.wi.us with "Monitoring Well Data Form" in the subject line and the name of the DNR contact expecting the data in the body of your message.
- For technical assistance in preparing this file format, contact;


John A. Sissons
Information Systems Development Professional
Wisconsin Department of Natural Resources
Bureau of Waste Management / CO
101 S. Webster St., PO Box 7921
Madison, WI 53707-7921
☎ Telephone: 608-267-7567
☎ Fax: 608-267-2768
E-mail: mailto:John.Sissons@dnr.state.wi.us


## WS_MONITORING_WELL Record Specification:

| Column_Name | Data_Type | Allowed_Values | Comments |
|---|---|---|---|
| WI_UNIQUE_WELL_NO | Varchar2(6) | | WUWN |
| FACILITY_LICENSE_NO | Number(10) | | Facility license/permit or Monitoring license number |
| DNR_WELL_ID | Varchar2(3) | | Point Id |
| ROUTE_TO_WW_FLAG | Varchar2(1) | ( Y, N ) | Route to watershed/waste water |
| ROUTE_TO_WM_FLAG | Varchar2(1) | ( Y, N ) | Route to waste |

| | | | |
|---|---|---|---|
| | | | management |
| ROUTE_TO_RR_FLAG | Varchar2(1) | ( Y, N ) | Route to remediation/redevelopment |
| ROUTE_TO_OTHER_FLAG | Varchar2(1) | ( Y, N ) | Route to other |
| ROUTE_OTHER_DESC | Varchar2(2000) | | |
| VARIANCE_GRANT_FLAG | Varchar2(1) | ( Y, N ) | |
| FACILITY_NAME | Varchar2(60) | | |
| WELL_TYPE_CODE | Varchar2(5) | | Number/Initials from the list |
| WASTE_SOURCE_DIST_FT_AMT | Number(4) | | Distance from waste source in feet |
| ENF_STD_APPLY_FLAG | Varchar2(1) | ( Y, N ) | |
| GRID_NS_FT_AMT | Number(4) | | |
| GRID_NS_DIR_CODE | Varchar2(1) | ( N , S ) | |
| GRID_EW_FT_AMT | Number(4) | | |
| GRID_EW_DIR_CODE | Varchar2(1) | ( E , W ) | |
| LOCAL_GRID_OR_LOCATION_CODE | Varchar2(1) | G for Grid Origin, L for Well Location | |
| ESTIMATED_FLAG | Varchar2(1) | ( Y, N) | |
| LL_LAT_DEG_AMT | Number(2) | | |
| LL_LAT_MIN_AMT | Number(2) | | |
| LL_LAT_SCND_AMT | Number(6,4) | | |
| LL_LONG_DEG_AMT | Number(2) | | |
| LL_LONG_MIN_AMT | Number(2) | | |
| LL_LONG_SCND_AMT | Number(6,4) | | |
| SP_NORTHING_FT_AMT | Number(9,2) | | Feet |
| SP_EASTING_FT_AMT | Number(9,2) | | Feet |
| SP_ZONE_CODE | Varchar2(4) | ( S, C, N ) | |
| PLSS_Q2_SCTN_CHAR_CODE | Varchar2(2) | | Quarter-Quarter |
| PLSS_Q1_SCTN_CHAR_CODE | Varchar2(2) | | Quarter |
| PLSS_SCTN_ID | Number(2) | | |
| PLSS_TWN_ID | Number(2) | | |
| PLSS_RNG_ID | Number(2) | | |
| PLSS_RNG_DIR_CHAR_CODE | Varchar2(1) | ( E, W ) | |
| WASTE_SOURCE_GRADIENT_CODE | Varchar2(1) | U for Upgradient, S for Sidegradient, D for DownGradient, N for unknownWell location gradient relative to waste source | |
| GOVT_LOT_NO | Varchar2(5) | | |
| COMMON_WELL_NAME | Varchar2(60) | | |
| FID | Varchar2(9) | | |
| WELL_CONSTRUCT_DATE | Date | | mmddyyyy |
| CONSTRUCT_FIRM_NAME | Varchar2(60) | | |
| CONSTRUCT_NAME | Varchar2(60) | | |
| PROTECT_PIPE_TOP_MSL_FT_AMT | Number(6,2) | | Feet |

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|---|---|---|---|
| CASING_TOP_MSL_FT_AMT | Number(6,2) | | Feet |
| LAND_SURFACE_MSL_FT_AMT | Number(6,2) | | Feet |
| SURFACE_SEAL_BOT_MSL_FT_AMT | Number(5,1) | | Feet |
| SURFACE_SEAL_BOT_BGS_FT_AMT | Number(3,1) | | Feet |
| BENTONITE_SEAL_TOP_MSL_FT_AMT | Number(5,1) | | Feet |
| BENTONITE_SEAL_TOP_BGS_FT_AMT | Number(3,1) | | Feet |
| FINE_SAND_TOP_MSL_FT_AMT | Number(5,1) | | Feet |
| FINE_SAND_TOP_BGS_FT_AMT | Number(3,1) | | Feet |
| FILTER_TOP_MSL_FT_AMT | Number(5,1) | | Feet |
| FILTER_TOP_BGS_FT_AMT | Number(3,1) | | Feet |
| SCREEN_TOP_MSL_FT_AMT | Number(5,1) | | Feet |
| SCREEN_TOP_BGS_FT_AMT | Number(3,1) | | Feet |
| WELL_BOTTOM_MSL_FT_AMT | Number(5,1) | | Feet |
| WELL_BOTTOM_BGS_FT_AMT | Number(3,1) | | Feet |
| FILTER_BOTTOM_MSL_FT_AMT | Number(5,1) | | Feet |
| FILTER_BOTTOM_BGS_FT_AMT | Number(3,1) | | Feet |
| BOREHOLE_BOTTOM_MSL_FT_AMT | Number(5,1) | | Feet |
| BOREHOLE_BOTTOM_BGS_FT_AMT | Number(3,1) | | Feet |
| BOREHOLE_DIAM_IN_AMT | Number(8,3) | | Inches |
| CASING_OUTER_DIAM_IN_AMT | Number(8,3) | | Inches |
| CASING_INNER_DIAM_IN_AMT | Number(8,3) | | Inches |
| USCS_SCREEN_SOIL_GP_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_GM_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_GC_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_GW_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_SW_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_SP_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_SM_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_SC_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_ML_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_MH_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_CL_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_CH_FLAG | Varchar2(1) | ( Y, N ) | |
| USCS_SCREEN_SOIL_BEDROCK_FLAG | Varchar2(1) | ( Y, N ) | |
| SIEVE_ANALYSIS_PERFORM_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_METHOD_TYPE_CODE | Varchar2(2) | RO for Rotary, HA for Hallow Stem Augur, OR for Other | |
| OTHER_DRILL_METHOD_DESC | Varchar2(2000) | | Pick from the list |
| DRILL_FLUID_WATER_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_FLUID_AIR_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_FLUID_MUD_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_FLUID_NONE_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_ADDITIVE_USE_FLAG | Varchar2(1) | ( Y, N ) | |
| DRILL_ADDITIVE_DESC | Varchar2(2000) | | |
| CON_WATER_SOURCE_DESC | Varchar2(2000) | | |
| CAP_LOCK_FLAG | Varchar2(1) | ( Y, N ) | |
| PROTECT_CVR_INNER_DIAM_IN_AMT | Number(3,1) | | Inches |
| PROTECT_COVER_LENGTH_FT_AMT | Number(3,1) | | Feet |
| PROTECT_COVER_TYPE_CODE | Varchar2(2) | ST for steel and OR for Other | |
| PROTECT_COVER_OTHER_DESC | Varchar2(2000) | | |

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|---|---|---|---|
| ADDITIONAL_PROTECT_FLAG | Varchar2(1) | ( Y, N ) | |
| ADDITIONAL_PROTECT_DESC | Varchar2(2000) | | |
| SURFACE_SEAL_TYPE_CODE | Varchar2(2) | BT for Bentonite, CT for Concrete and OR for Other | |
| SURFACE_SEAL_OTHER_DESC | Varchar2(2000) | | |
| PROTECT_CASING_TYPE_CODE | Varchar2(2) | BT for Bentonite and OR for Other | |
| PROTECT_CASING_OTHER_DESC | Varchar2(2000) | | |
| ANNULAR_SPACE_SEAL_GCB_FLAG | Varchar2(1) | ( Y, N ) | |
| ANNULAR_SPACE_BSS_FLAG | Varchar2(1) | ( Y, N ) | |
| ANNULAR_SPCE_BSS_WT_LBGAL_AMT | Number(5) | | Lbs/gal |
| ANNULAR_SPACE_BS_FLAG | Varchar2(1) | ( Y, N ) | |
| ANNULAR_SPACE_BS_WT_LBGAL_AMT | Number(5) | | Lbs/gal |
| ANNULAR_SPACE_BCG_FLAG | Varchar2(1) | ( Y, N ) | |
| ANNULAR_SPACE_BCG_PERCENT_AMT | Number(3) | | |
| ANNULAR_SPC_SEAL_VOL_CUFT_AMT | Number(5) | | Cubic feet |
| ANNULAR_INSTALL_TYPE_CODE | Varchar2(1) | T for Tremie, P for Tremie pumped and G for gravity. | |
| BENTONITE_SEAL_TYPE_CODE | Varchar2(2) | BG for Bentonite Granules, BC for Bentonite Chips and OR for Other | |
| BENTONITE_SEAL_OTHER_DESC | Varchar2(2000) | | |
| BENTONITE_SEAL_DIAM_CODE | Varchar2(1) | 1 for ¼ in , 2 for ½ in and 3 for 3/8 in. | |
| FINE_SAND_DESC | Varchar2(2000) | | |
| FINE_SAND_VOL_CUFT_AMT | Number(5) | | Cubic-feet |
| FILTER_PACK_DESC | Varchar2(2000) | | |
| FILTER_PACK_VOL_CUFT_AMT | Number(5) | | Cubic-feet |
| WELL_CASING_TYPE_CODE | Varchar2(2) | P4 for PVC schedule 40, P8 for PVC schedule 80 and OR for other | |
| WELL_CASING_OTHER_DESC | Varchar2(2000) | | |
| SCREEN_MATERIAL_NAME | Varchar2(60) | | |
| SCREEN_TYPE_CODE | Varchar2(2) | FC for Factory Cut, CS for Continuous slot and OR for Other | |
| SCREEN_TYPE_OTHER_DESC | Varchar2(2000) | | |
| SCREEN_MANFACTURE_NAME | varchar2(60) | | |
| SCREEN_SLOT_SIZE_IN_AMT | Number(4,3) | | Inches |
| SCREEN_SLOT_LENGTH_IN_AMT | Number(3,1) | | Feet |
| BACKFILL_TYPE_CODE | Varchar2(2) | NO for None and OR for Other | |
| BACKFILL_OTHER_DESC | Varchar2(2000) | | |
| CON_SUBMIT_FIRM_NAME | Varchar2(60) | | |
| CON_SUBMIT_BY_INIT_TEXT | Varchar2(60) | | |
| DNR_CNTY_CODE | Number(2) | | |

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|---|---|---|---|
| CNTY_NAME | Varchar2(11) | | |
| WELL_PURGE_FLAG | Varchar2(1) | ( Y, N ) | |
| WELL_DEVELOP_BABA_FLAG | Varchar2(1) | ( Y, N ) | surged with bailer and bailed |
| WELL_DEVELOP_BAPU_FLAG | Varchar2(1) | ( Y, N ) | surged with bailer and pumped |
| WELL_DEVELOP_BLBA_FLAG | Varchar2(1) | ( Y, N ) | surged with block and bailed |
| WELL_DEVELOP_BLPU_FLAG | Varchar2(1) | ( Y, N ) | surged with block and pumped |
| WELL_DEVELOP_BBPU_FLAG | Varchar2(1) | ( Y, N ) | surged with block , bailed and pumped |
| WELL_DEVELOP_COMP_FLAG | Varchar2(1) | ( Y, N ) | compressed air |
| WELL_DEVELOP_BAIL_FLAG | Varchar2(1) | ( Y, N ) | bailed only |
| WELL_DEVELOP_PUMP_FLAG | Varchar2(1) | ( Y, N ) | pumped only |
| WELL_DEVELOP_PMPS_FLAG | Varchar2(1) | ( Y, N ) | pumped slowly |
| WELL_DEVELOP_OTHR_FLAG | Varchar2(1) | ( Y, N ) | Other |
| WELL_DEVELOP_OTHER_DESC | Varchar2(2000) | | |
| WELL_DEVELOP_TIME_MIN_AMT | Number(4) | | Minutes |
| WELL_DEPTH_FT_AMT | Number(4,1) | | Feet |
| WELL_DIAM_IN_AMT | Number(4,2) | | Inches |
| FILTER_PACK_WATR_VOL_CUFT_AMT | Number(4,1) | | gal |
| REMOVE_WATER_VOL_GAL_AMT | Number(4,1) | | gal |
| ADD_WATER_VOL_GAL_AMT | Number(4,1) | | gal |
| DEV_WATER_SOURCE_DESC | Varchar2(2000) | | |
| WATER_ANALYISIS_PERF_FLAG | Varchar2(1) | ( Y, N ) | |
| BEFORE_WATER_DEPTH_FT_AMT | Number(5,2) | | Feet |
| AFTER_WATER_DEPTH_FT_AMT | Number(5,2) | | Feet |
| DEVELOP_BEGIN_DATE | Date | | mmddyyyy |
| DEVELOP_END_DATE | Date | | mmddyyyy |
| DEVELOP_BEGIN_TIME | Number(4) | | HHMM |
| BEGIN_TIME_AM_PM_CODE | Varchar2(2) | ( AM, PM ) | |
| DEVELOP_END_TIME | Number(4) | | HHMM |
| END_TIME_AM_PM_CODE | Varchar2(2) | ( AM, PM ) | |
| BEFORE_SEDIMENT_IN_AMT | Number(3,1) | | Inches |
| AFTER_SEDIMENT_IN_AMT | Number(3,1) | | Inches |
| BEFORE_WATER_QUALITY_CODE | Varchar2(1) | ( C for Clear, T for Turbid ) | |
| BEFORE_WATER_QUALITY_DESC | Varchar2(2000) | | |
| AFTER_WATER_QUALITY_CODE | Varchar2(1) | ( C for Clear, T for Turbid ) | |
| AFTER_WATER_QUALITY_DESC | Varchar2(2000) | | |
| BEFORE_TSS_MGL_AMT | Number(5,1) | | mg/l |
| AFTER_TSS_MGL_AMT | Number(5,1) | | mg/l |
| BEFORE_COD_MGL_AMT | Number(5,1) | | mg/l |
| AFTER_COD_MGL_AMT | Number(5,1) | | mg/l |
| DEVELOP_BY_FIRST_NAME | Varchar2(20) | | |
| DEVELOP_BY_LAST_NAME | Varchar2(20) | | |

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|---|---|---|---|
| DEVELOP_BY_FIRM_NAME | Varchar2(60) | | |
| ADDITIONAL_COMMENT | Varchar2(2000) | | |
| OWNER_FIRST_NAME | Varchar2(20) | | |
| OWNER_LAST_NAME | Varchar2(20) | | |
| OWNER_FIRM_NAME | Varchar2(60) | | |
| OWNER_ADDR | Varchar2(60) | | |
| OWNER_CITY | Varchar2(60) | | |
| OWNER_STATE | Varchar2(2) | | |
| OWNER_ZIP | Varchar2(12) | | |
| DEV_SUBMIT_INIT_TEXT | Varchar2(60) | | |
| DEV_SUBMIT_NAME | Varchar2(60) | | |
| DEV_SUBMIT_FIRM_NAME | Varchar2(60) | | |
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