

APPLICATION TO OPERATE A FACILITY
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT
2045 MORSE ROAD, BUILDING F-2
COLUMBUS, OHIO 43229-6693
(614) 265-6922



1.	Name of Applicant: <u>Industrial Waste Control/GroundTech.</u> Address: <u>240 Sinter Ct, Youngstown, Oh 44510</u> Date: <u>1/31/14</u> eMail Address: <u>mfrontino@iwc-inc.com</u> For an Order or a Permit to Operate: <input checked="" type="checkbox"/> Existing Facility <input type="checkbox"/> New Facility	Phone #: <u>(330) 270-9900 ext. 108</u>
2.	PURPOSE OF FACILITY: <input checked="" type="checkbox"/> Storage <input type="checkbox"/> Recycling <input checked="" type="checkbox"/> Treatment (Check all that Apply) <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Disposal	
3.	TYPE OF MATERIAL: <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Drill Cuttings <input checked="" type="checkbox"/> Drilling Mud <input checked="" type="checkbox"/> Other Waste Substance (explain) <u>Tank bottom sludge</u>	
4.	If a Business Entity, list the statutory agent and include a certified copy of their appointment: Name: <u>Matt Frontino</u> Address: <u>240 Sinter Ct, Youngstown, OH, 44510</u>	
5.	Engineer of Record: Name: <u>MS Consultants, Inc.</u> Address: <u>333 East Federal Street, Youngstown, Ohio 44503</u> Ohio Professional Engineering License Number: <u>E-37549</u> <i>more Barry Rubin Girard, OH</i>	
6.	Address of Facility: Address: <u>240 Sinter Ct, Youngstown, Oh 44510</u> County: <u>Mahoning</u> Township: _____ Municipal Corporation: _____ Latitude: <u>N 40.39724</u> Longitude: <u>W79.63718</u>	
7.	Write a brief description of the facility and operations: <u>Our facility is a multi-office multi bay structure with a relatively large area (~15 acre) outside laydown/storage area.</u> <u>Operations include: Tank cleaning, decontamination, radiological surveys, waste storage, waste characterization, waste treatment (solidification), and waste preparation for shipment</u>	

8. Include all information as set forth in the "Guidelines for Application for Chief's Order". Attach Additional Documents

I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.

I certify that the facility will comply with or is currently in compliance with all provisions of Chapter 1509 ORC, Chapter 1501 OAC, and all terms and conditions of orders and permits issued by the Chief, Division of Oil and Gas Resources Management.

Signature of Authorized

Agent

Name (Type or Print) Matthew A. Frantino Title
President

Sworn to and subscribed before me this the 4th day of February, 2014.

MARK A GRIMES, Notary Public

In and for the State of Ohio

My Commission Expires May 10, 2014

Expires)

(Date Commission

ATTACHMENT 1 APPLICATION

ATTACHMENT 2 SITE OVERVIEW/DRAWING

REVISED DATE/DESCRIPTION
 PROJECT NO. 12.367
 SHEET NO. C-4.0
 DRAWING

NOTICE

THIS DRAWING IS THE PROPERTY OF
 THE CONSULTANT AND IS NOT TO BE
 REPRODUCED OR USED IN ANY MANNER
 WITHOUT THE WRITTEN CONSENT OF
 THE CONSULTANT. IT IS THE RESPONSIBILITY
 OF THE USER TO OBTAIN ALL NECESSARY
 PERMITS AND APPROVALS FROM THE
 APPROPRIATE AGENCIES.

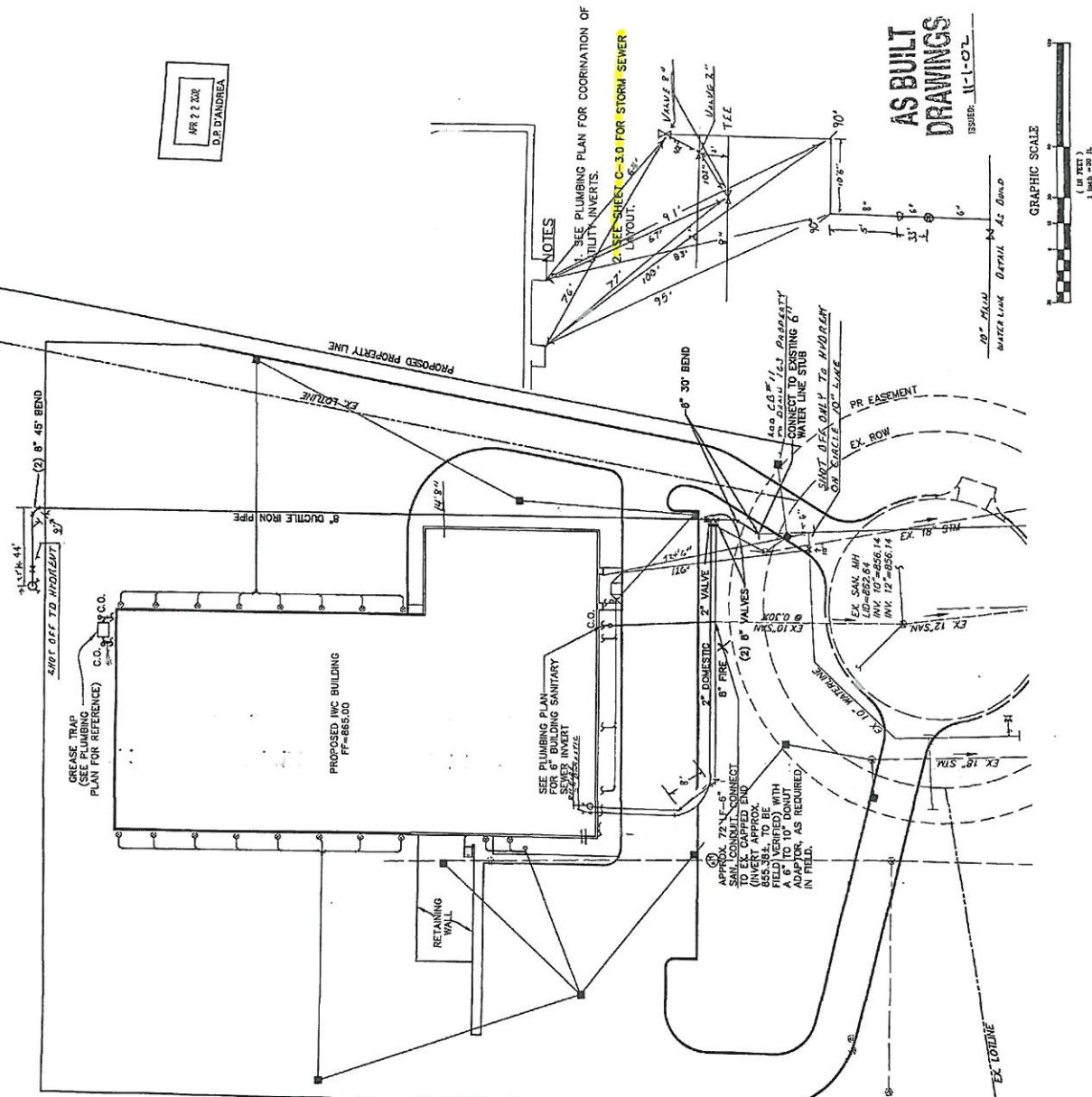


ITS CONSULTANTS, INC.
 ENGINEERS, ARCHITECTS, PLANNERS
 333 East Federal St.
 Youngstown, Ohio 44603
 Phone 330-744-5321
 Fax 330-744-5328

PROJECT
IWC
 INDUSTRIAL
 WASTE
 CONTROL
 NEW OFFICE &
 MAINTENANCE
 BUILDING
 SHEET TITLE
 SITE
 UTILITY
 PLAN

KEY PLAN

DATE: 11-1-07
 DRAWING: C-4.0
 PROJECT NO.: 12.367
 SHEET NO.: 12.367





Google earth



ATTACHMENT 3 DETAILED DESCRIPTION

IWC/GROUNDTech and our business associates Austin Master Services will be performing the following tasks at our Sinter Ct. facility:

- Radiological waste characterization using in-situ counting equipment (ISOCS).
- Waste treatment/stabilization and down-blending (down blending to occur only after 03219 license amendment).
- Pressure washing, tank cleaning and decontamination
- Containerized waste storage

It should be noted that this facility will fall under Austin Master Services Ohio 03219 Radioactive Materials license #03219510000. This license allows for, "possessing, storage, and shipment of radioactive material" as well as, "receipt, shipment and radiological analysis of containerized TENORM waste".

Our Youngstown facility is a multi-bay garage with an attached office area. Trucks, transporting brine and/or sludge will enter a designated bay and will undergo radiological analysis using the AMS in-situ protocol. This protocol will produce an analytical report detailing the observed concentration of Ra-226/228.

IF: ISOCS finds that the combined Ra226/Ra228 concentration including propagated uncertainty is less than the regulatory limit, the container is acceptable for disposal in an OEPA permitted landfill.

THEN: Collect a composite sample from the container using SW846 sampling methodology. Label the composite sample and chart the in-situ waste container ISOCS result.

IF: ISOCS determines the waste container's combined Ra226/Ra228 concentration is below 6.99 pCi/g but, exceeds 6.99 pCi/g when the propagated uncertainty is added.

THEN: The waste will be sequestered and counted again using a longer count time. A longer count time will decrease the ISOCS MDA and propagated uncertainty.

IF: The results are still inconclusive (reported concentration is below 6.99 pCi/g but exceeds 6.99 pCi/g when the propagated uncertainty is added)

THEN: The waste will remain sequestered and a composite sample will be collected from the container using SW846 sampling methodology. The samples will be analyzed by a third-party accredited laboratory using EPA method 901.1M (the full 21 day in-growth period is mandatory).

IF: The third-party analytical results of the waste is found to exceed the regulatory threshold independent of propagated uncertainty, the waste is **NOT** acceptable for disposal in an OEPA permitted landfill.

THEN: The waste will remain sequestered and a decision made regarding possible down-blending or disposal at an out of state landfill permitted to accept it.

Composited samples from shipments that the ISOCS determined were acceptable and that were disposition into the same OEPA permitted landfill, shall be combined and homogenize them into a single container. The homogenized waste sample will be counted on a daily basis (end of day) by the AMS lab and the results trended. This approach will serve as an early indication of potential problems. If daily sample analysis indicates radionuclide concentrations in excess of the decision limit, the AMS lab shall immediately notify the ISOCS SME and all ISOCS analysis shall STOP until a determination is made for the exceedence. The determination and resolution shall be documented and retained with the QA documentation for the affected shipment(s).

WASTE TREATMENT

It is expected that a portion of our customers will wish to take advantage of our waste stabilization services. Our facility is equipped with a bermed containment designed to prevent waste material from contacting the ground. Our waste treatment/stabilization process involves pumping or dumping the waste material into half-round containers. Waste will be mixed with a non-hazardous media and agitated using a track-hoe excavator until the physical consistency passes the EPA paint filter test. The waste will then be transferred into open top roll-off containers for shipment to an approved facility.

Future operations will involve "blending" of waste material that exceeds the regulatory limit of 6.99 pCi/g Ra-226/228. This operation will be similar in nature to the waste conditioning activities described above. Basically, our analytical process will identify tanks containing waste that exceeds the limit, based on the weight of the waste material and radiological concentration a formula will be used to determine how much virgin material is needed to drive the activity per unit mass concentration to acceptable levels. The waste and virgin material will be thoroughly mixed using a track-hoe excavator and re-sampled. Once the waste is found to below the regulatory limit it will be loaded into roll-off containers for transportation to the disposal facility.

TANK WASHING/CLEANING/DECONTAMINATION

IWC/Groundtech possesses multiple options for cleaning vacuum tanks, truck tankers and almost any kind of tank used in the oil/gas industry. Tanks are pressure washed in our cleaning bay and the waste is vacuumed into a separate container via a closed loop system. All workers are monitored using TLD dosimetry, air sampling and radon monitoring. Tanks that were used to transport waste that was found to exceed the regulatory limit of 6.99 pCi/g Ra-226/228 can also be decontaminated at our facility. The tanks will be surveyed for unconditional use by qualified radiological protection technicians using calibrated instrumentation.

WASTE STORAGE

It is expected that temporary onsite storage of containerized waste will be necessary. Containerized waste will be stored on a gravel lot. Waste containers will be inspected prior to receipt, after moving and periodically to ensure container integrity remains intact.

mixing + storage to be in existing lined and bermed containment.

EXPECTED WASTE VOLUMES

Approximately 50,000 tons of material per year is passed through our facility with the majority of work activities focused on our tank cleaning operations. It is expected that our new business lines (analytical and waste conditioning) will likely double that amount.

Final disposition will be as directed by waste generator. Facility maintains, handles and disposes of wastes from each generator separately and discreetly.

OHIO DEPARTMENT OF HEALTH LICENSE FOR RADIOACTIVE MATERIAL

Pursuant to Chapter 3748 of the Ohio Revised Code, and in reliance on statements and representations made by the licensee, a license is hereby issued authorizing the licensee named herein to receive, acquire, possess and transfer radioactive material as designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the applications of Chapter 3748 of the Ohio Revised Code and all applicable rules promulgated thereunder. This license is subject to all applicable rules, regulations and orders of the Ohio Department of Health now or hereinafter in effect and to any conditions specified below.

LICENSEE	LICENSE NUMBER
1. Austin Master Services, LLC	2. 03219 510000
	EXPIRATION DATE
	3. February 1, 2019
2. 1157 Phoenixville Pike, Suite 102 West Chester, PA 19380	FILE/ID NUMBER
	4. 501482/7549

6. RADIOACTIVE MATERIAL	7. CHEMICAL AND/OR PHYSICAL FORM	8. MAXIMUM QUANTITY THAT LICENSEE MAY PROCESS AT ANY ONE TIME UNDER THIS LICENSE
A. Uranium – Depleted and Natural	A. Any	A. As necessary for the uses authorized in item no. 9. Total not to exceed 370 GBq (10 Ci)
B. Any radioactive material with atomic numbers 1 to 103, except Special Nuclear Material	B. Any	B. No single isotope to exceed 37 GBq (1Ci). Total not to exceed 370 GBq (10Ci)
C. U-233	C. Any	C. 200 grams as specified in condition no. 11
D. Uranium enriched in the U-235 isotope	D. Any	D. 350 grams of contained U-235 as specified in condition no.11
E. Plutonium	E. Any	E. 200 grams as specified in condition no. 11
F. Ra-226	F. Contaminant in TENORM solid waste	F. As necessary for the uses authorized in item no. 9. Total not to exceed 74 GBq (2 Ci)
G. Ra-228	G. Contaminant in TENORM solid waste	G. As necessary for the uses authorized in item no. 9. Total not to exceed 74 GBq (2 Ci)

9. AUTHORIZED USE

- A to E Processing, storage, packaging, and shipment of radioactive material incident to the surface decontamination of structures, components and items for the purpose of unrestricted release. This license also authorizes surveys, characterizations and remediation of radioactively contaminated structures, materials, soils and soil-like materials.
- F to G Receipt, shipment and radiological analysis of containerized TENORM solid waste.

CONDITIONS

10. Licensed materials shall be used **only at 240 Sinter Ct., Youngstown, Ohio; and temporary job sites of the licensee anywhere in the State of Ohio.** Except for calibration sources, reference standards and contaminated equipment owned by the licensee, processing of licensed material at each temporary job site shall be limited to material originating from each site. This material must either be transferred to an authorized recipient or remain at the temporary job site after licensee activities are complete.

OHIO DEPARTMENT OF HEALTH LICENSE FOR RADIOACTIVE MATERIALS SUPPLEMENTARY SHEET	Page 2 of 3
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	File/ID Number: 501482/7549
	Amendment No. 0

11. For each kind of Special Nuclear Material, determine the ratio between the quantity of that Special Nuclear Material and the quantity specified in 8C, 8D, or 8E for the same kind of special nuclear material. The sums of such ratios for all kinds of Special Nuclear Material in combination shall not exceed "1" (i.e. unity).
12. Licensed material shall be used by those individuals receiving the training described in the license application dated 12/6/2013.
13. The Radiation Safety Officer (RSO) for this license is: **Peter Collopy, CHP, CIH, CSP**
14. The licensee shall notify the Ohio Department of Health in writing **at least 14 days before initiating activities at a temporary job site**. This notification shall include:
 - A. The estimated type, quantity, and physical/chemical forms of licensed material to be used;
 - B. The specific site location;
 - C. A description of planned activities including waste management and disposition;
 - D. The estimated start date and completion date for the job; and
 - E. The name and title of a point of contact for the job, including information on how to contact the individual.
 - F. Written agreements between the licensee and customer pursuant to condition no. 15
15. If a customer also holds a license issued by the Ohio Department of Health or the Nuclear Regulatory Commission, the licensee shall establish a written agreement between the licensee and the customer specifying which licensee activities will be performed under the customer's license and supervision and which licensee activities will be performed under the licensee's supervision pursuant to this license. The agreement shall include a commitment by the licensee and the customer to ensure safety, plus any commitments by the licensee to help the customer clean up the temporary job site if there is an accident. A copy of this agreement shall be included in the notification required by license condition 14.
16. **The licensee shall maintain records of information important to decommissioning each temporary job site** at the applicable job site pursuant to the applicable regulations. The records shall be made available to the customer upon request. At the completion of activities at a temporary job site, the licensee shall transfer these records to the customer for retention.
17. Before processing any licensed material at a temporary job site in quantities requiring an emergency plan the licensee shall either:
 - A. Obtain Ohio Department of Health approval of an evaluation demonstrating that an emergency plan is not required pursuant to rules 3701:1-40-14 and 3701:1-44-14 of the Administrative Code.
 - B. Submit written confirmation to the Director, Ohio Department of Health, that licensee personnel have been trained and will follow the provisions of an existing emergency plan approved by the Ohio Department of Health or the Nuclear Regulatory Commission for the temporary job site.
18. If approved by a Radiation Safety Officer specifically identified in this license, the licensee may take reasonable action in an emergency that departs from conditions in this license when the action is immediately needed to protect public health and safety, and no action consistent with all license conditions that can provide adequate or equivalent protection is immediately apparent. The licensee shall notify the Ohio Department of Health before, if practicable, and in any case, immediately after taking such emergency using the reporting procedure as specified in rule 3701:1-40-20 of the Administrative Code.
19. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination is not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:
 - A. Radioactive waste material shall not be stored with non-radioactive waste.
 - B. A written record of all radioactive waste material shall be maintained until it has been shipped to an authorized recipient in accordance with all applicable regulations. Accountability of radioactive waste material prepared for

OHIO DEPARTMENT OF HEALTH
LICENSE FOR RADIOACTIVE MATERIALS
SUPPLEMENTARY SHEET

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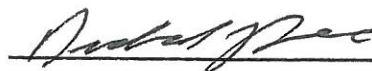
shipment but not yet shipped shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.

- C. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that the material has been received.
- D. All records and written confirmations required by this condition shall be maintained by the licensee for inspection by the Ohio Department of Health.
20. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the U.S. NRC has specifically approved for transport of plutonium by air.
21. Sealed sources shall be tested for leakage and/or contamination in accordance with rule 3701:1-38-24 of the Ohio Administrative Code.
22. All sealed sources that are used or obtained shall have been evaluated and approved under the provision of rule 3701:1-46-49 of the Administrative Code or by equivalent NRC or Agreement State regulation.
23. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
24. The licensee is authorized to transport licensed material only in accordance with the provisions of Chapter 3701:1-50 of the Ohio Administrative Code.
25. Within 30 days of completing activities at each temporary job site location, the licensee shall notify the Ohio Department of Health in writing of the temporary job site status and the disposition of any licensed material used.
26. The license is authorized to conduct radiological analysis of containerized TENORM solid waste in accordance with the Austin Master - Ohio TENORM Waste Acceptance Procedure, number RP-AMS-035 revision 4, dated 1/27/2014.
27. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Ohio Department of Health's statutes, rules, and orders shall govern unless statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated 12/6/2013; and supplemental communications dated 12/13/2013; 1/6/2014; 1/26/2014; 1/27/2014; and 1/28/2014.

For the Ohio Department of Health

DATE: 1/31/14

BY:



Michael J. Snee, Chief
Bureau of Radiation Protection
on behalf of the Director of Health