DEQ Montana Department of Environmental Quality
Water Protection Bureau
Montana Pollutant Discharge Elimination System

Agency Use
Permit No.: MTR04
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM **MS4-AR**

Annual Report Form
Storm Water Discharges Associated with MS4s
MTR040000

This annual report form is to be completed by each permittee authorized under the General Permit for Storm Water Discharges Associated with Small Municipal Separate Storm Water Sewer Systems (MS4s). The completed form must be electronically submitted to DEQ by March 1st of each year starting March 1st, 2023.

Reporting Year: ☒ 2023 ☐ 2024 ☐ 2025 ☐ 2026 *(reporting period is for the preceding calendar year, Jan 1st- Dec 31st)*

MS4 Information

Permit Number: M T R 0 4 0 0 0 4

Small MS4 Name: City of Great Falls

Contact Person, *(name, title)*: Nathan Besich

Mailing Address: PO Box 5021

City, State, and Zip Code: Great Falls, MT 59403

Phone Number, Email Address: 406-727-8390, nbesich@greatfallsmt.net

Authorized as a Co-permittee? ☐ Yes: _____ ☒ No

(If, yes provide Co-permittee MS4 name in the blank provided. Each co-permittee must submit a separate complete annual report form.)

Is the MS4 sharing responsibility? If yes, attach written acceptance and explanation of shared obligation(s). ☐ Yes ☒ No

Attach an organizational chart identifying the primary SWMP coordinator, positions responsible for implementing requirements of the permit, and contact information for each individual. ☒ Attached ☐ Not Attached

Minimum Control Measure 1 & 2

Link to storm water website: https://greatfallsmt.net/publicworks/storm-water

List of four key target audiences:	Associated Pollutants:	Outreach strategy:
Landscapers	Fertilizers, lawn clippings, yar	Formal notificaion via letter
General Common Education	Sediment, trash, yard debris,	Student outreach/class work
Restaurants or Food Trucks	Fats, oils, & grease	Brochures/Fliers
Lawn & Garden Care	Fertilizers, lawn clippings, yar	Social Media & Cleanup Days/

Attach documentation of participation and/or feedback of key target audiences. ☒ Attached ☐ Not Attached

Minimum Control Measure 3 *(attach the following in the order listed)*

List of potential non-storm water discharges identified as significant contributors of pollutants (i.e. illicit discharges), associated pollutants, and any local controls or conditions placed on these discharges. ☒ Attached ☐ Not Attached

Have there been updates to the MS4's storm sewer maps? ☒ Yes ☐ No, the map(s) were last updated: _____

If yes, submit the maps using one of the following options:

- ☐ Electronic GIS shapefiles emailed to DEQMPDESDataManagement@mt.gov
- ☐ Attached Hard copy
- ☒ Link to online maps: https://greatfallsmt.net/publicworks/storm-water

Summary of investigations and corrective actions taken over the past year per the Illicit Discharge and Corrective Action Plan. ☒ Attached ☐ Not Attached

Number of outfalls inspected during dry weather: 39 of 88 *(total number of outfalls)*

Number of high priority outfalls inspected: 19 of 19 *(total number of high priority outfalls)*

Attach a summary of any resulting actions taken from screening results. ☐ Attached ☒ Not Applicable

Year 2023 only, unless updates were made:

A copy or link to the adopted ordinance, policy, procedure, and/ or regulatory mechanism prohibiting illicit discharges. ☐ Attached or ☒ Link https://library.municode.com/mt/great_falls_/codes/code_

Minimum Control Measure 4 *(attach the following in the order listed)*

List of construction sites/projects inspected over the last year and any resulting actions. ☒ Attached ☐ Not Attached

Year 2023 only, unless updates were made:

A copy of the construction storm water management plan review checklist. ☒ Attached ☐ Not Attached

A copy of the construction site inspection form or checklist. ☒ Attached ☐ Not Attached

A copy or link to the adopted ordinance, policy, procedure, and/or regulatory mechanism requiring construction storm water controls. ☐ Attached or ☒ Link https://library.municode.com/mt/great_falls_/codes/code_

Minimum Control Measure 5 *(attach the following in the order listed)*

Inventory of regulated projects using offsite treatment for post-construction runoff. ☐ Attached ☒ Not Applicable

Number of high priority post-construction storm water management controls inspected: 1

Attach a summary of any resulting actions taken from inspections. ☐ Attached ☒ Not Applicable

Year 2023 only, unless updates were made:

A copy of the post-construction storm water management plan review checklist. ☒ Attached ☐ Not Attached

A copy of the post-construction site inspection form or checklist. ☒ Attached ☐ Not Attached

A copy or link to the adopted ordinance, policy, procedure, and/or regulatory mechanism requiring post-construction storm water controls. ☐ Attached or ☒ Link https://library.municode.com/mt/great_falls_/codes/code_

Year 2025 only: Submit a plan to modify relevant codes, ordinances, policies, and/or programs to implement LID/green infrastructure concepts. ☐ Attached ☐ Not Attached

Minimum Control Measure 6 *(attach the following in the order listed)*

Number of SOPs evaluated: 0 of 59 *(total number of SOPs for permittee facilities/activities)*

Summary of SOP updates made in the last year. ☐ Attached ☒ Not Applicable

Records of completed trainings in conformance with section II.B. of the General Permit. ☒ Attached ☐ Not Attached

Year 2023 only, unless updates were made:

Inventory of permittee facilities/activities with potential to contribute contaminants. ☒ Attached ☐ Not Attached

Summary of inspection procedures for facilities and their structural storm water controls. ☒ Attached ☐ Not Attached

Storm Water Management Plan (SWMP)

In the last year, were any public comments received on the SWMP? ☐ Yes ☒ No

If yes, attach a summary of comments received. ☐ Attached ☒ Not Applicable

In the last year, have additional SWMP updates been made other than those listed above? ☒ Yes ☐ No

If yes, attach a summary including the date and description of updates and rationale for decision making.
☒ Attached ☐ Not Applicable

Monitoring and Reporting *(attach the following in the order listed)*

☒ I verify all outfall monitoring has been performed and recorded in conformance with section II.C. and II.D. of the General Permit. *(If not able to dependably obtain two samples a year at each monitoring location, attach a summary of rationale. Contact DEQ regarding requests for a change in monitoring locations.)*

Attach a summary of implemented BMPs used to target and reduce discharges to impaired waterbodies and a schedule for the following year's BMP implementation. ☒ Attached ☐ Not Applicable

Year 2023 only, unless updates were made: Attach an inventory of outfalls discharging to impaired waterbodies including associated pollutants. ☒ Attached ☐ Not Applicable

MS4s with an approved TMDL:

Year 2023 only: Submit a TMDL-related sampling plan for DEQ review. ☒ Attached ☐ Not Applicable

Years 2024, 2025, and 2026: In the last year, were any public comments received on the sampling plan? ☐ Yes ☐ No

If yes, attach a summary of comments received and any resulting actions/modifications. ☐ Attached ☐ Not Applicable

Certification*

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information 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, including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA].

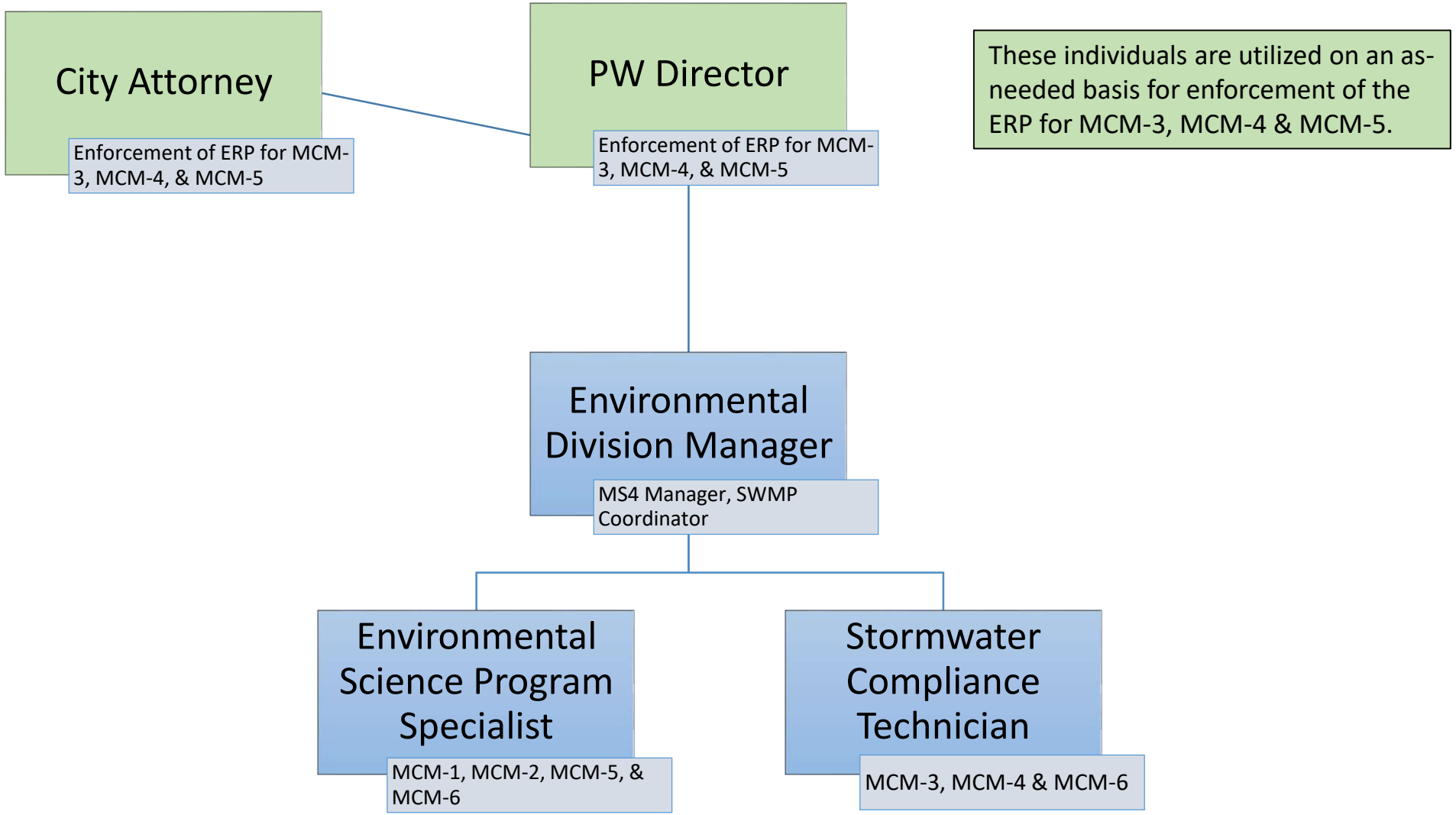
Name (Type or Print) Christoff T. Gaub	
Title (Type or Print) Public Works Director	Phone Number 406-727-8390
Signature	Date Signed February 28, 2023

* This Annual Report Form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

GENERAL ATTACHMENTS

SWMP Organizational Chart



Outfalls Discharging to Impaired Waterbodies & Associated Impairments		
Outfall ID#	Receiving Waterbody	Impairments
112	Sand Coulee Creek	Lead, Zinc
1	Missouri River (Sheep to Sun)	TSS
2	Missouri River (Sheep to Sun)	TSS
3	Missouri River (Sheep to Sun)	TSS
24	Missouri River (Sheep to Sun)	TSS
25	Missouri River (Sheep to Sun)	TSS
53	Missouri River (Sheep to Sun)	TSS
95	Missouri River (Sheep to Sun)	TSS
96	Missouri River (Sheep to Sun)	TSS
97	Missouri River (Sheep to Sun)	TSS
98	Missouri River (Sheep to Sun)	TSS
113	Missouri River (Sheep to Sun)	TSS
5	Missouri River (Sun to Rainbow)	TSS
7	Missouri River (Sun to Rainbow)	TSS
8	Missouri River (Sun to Rainbow)	TSS
9	Missouri River (Sun to Rainbow)	TSS
10	Missouri River (Sun to Rainbow)	TSS
11	Missouri River (Sun to Rainbow)	TSS
12	Missouri River (Sun to Rainbow)	TSS
13	Missouri River (Sun to Rainbow)	TSS
14	Missouri River (Sun to Rainbow)	TSS
15	Missouri River (Sun to Rainbow)	TSS
16	Missouri River (Sun to Rainbow)	TSS
17	Missouri River (Sun to Rainbow)	TSS
18	Missouri River (Sun to Rainbow)	TSS
19	Missouri River (Sun to Rainbow)	TSS
20	Missouri River (Sun to Rainbow)	TSS
21	Missouri River (Sun to Rainbow)	TSS
22	Missouri River (Sun to Rainbow)	TSS
23	Missouri River (Sun to Rainbow)	TSS
27	Missouri River (Sun to Rainbow)	TSS
28	Missouri River (Sun to Rainbow)	TSS
29	Missouri River (Sun to Rainbow)	TSS
30	Missouri River (Sun to Rainbow)	TSS
54	Missouri River (Sun to Rainbow)	TSS
55	Missouri River (Sun to Rainbow)	TSS
56	Missouri River (Sun to Rainbow)	TSS
57	Missouri River (Sun to Rainbow)	TSS
58	Missouri River (Sun to Rainbow)	TSS

Outfalls Discharging to Impaired Waterbodies & Associated Impairments		
Outfall ID#	Receiving Waterbody	Impairments
62	Missouri River (Sun to Rainbow)	TSS
63	Missouri River (Sun to Rainbow)	TSS
64	Missouri River (Sun to Rainbow)	TSS
65	Missouri River (Sun to Rainbow)	TSS
67	Missouri River (Sun to Rainbow)	TSS
68	Missouri River (Sun to Rainbow)	TSS
70	Missouri River (Sun to Rainbow)	TSS
71	Missouri River (Sun to Rainbow)	TSS
72	Missouri River (Sun to Rainbow)	TSS
73	Missouri River (Sun to Rainbow)	TSS
74	Missouri River (Sun to Rainbow)	TSS
75	Missouri River (Sun to Rainbow)	TSS
76	Missouri River (Sun to Rainbow)	TSS
103	Missouri River (Sun to Rainbow)	TSS
104	Missouri River (Sun to Rainbow)	TSS
107	Missouri River (Sun to Rainbow)	TSS
109	Missouri River (Sun to Rainbow)	TSS
60	Missouri River (Rainbow to Morony)	TSS, Copper
61	Missouri River (Rainbow to Morony)	TSS, Copper
102	Missouri River (Rainbow to Morony)	TSS, Copper

Outfalls Discharging to Impaired Waterbodies & Associated Impairments		
Outfall ID#	**Receiving Waterbody**	**Impairments**
31	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
34	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
35	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
36	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
37	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
39	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
40	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
41	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
43	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
45	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
46	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
47	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
48	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
49	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
51	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
52	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
100	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
101	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
111	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations

114	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
115	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations
116	Sun River	TSS, Total Nitrogen, Total Phosphorus, Sedimentation/Siltation, Other flow regime alterations

BMP Summary:

The City of Great Falls (COGF) continues to develop and implement its MS4 program that encompasses all required minimum control measures (MCM-1 through MCM-6). Implementation of the MS4 program will target pollutants of impairment by evaluating potential impacts/sources to receiving waterbodies and determining the best course of action to address those impacts/sources. COGF utilizes both administrative (implementation of the MS4 program) and structural (ponds other physical features, etc.) BMPs to specifically target removal of Total Phosphorous (TP), total Nitrogen (TN), and Sediment. For example, the primary purpose for the temporary BMPs required in MCM-4 as well as permanent BMPs required in MCM-5 is to minimize erosion and discharge of sediment. In addition, removal of sediment can also potentially aide in the removal of other types of potential pollutants (i.e. TN, TP, metals, etc.).

MCM-1 & MCM-2 ATTACHMENTS

Schedule Thursday, May 12th and Friday, May 13th 2022

TIME	WHERE	WHAT
9:00	Students load the bus Bus Loop south of GFHS Fieldhouse	• Introduction: Nate, colleague and Charlie, and Cynde • Nate explain his role and how the City of Great Falls meets the requirements of the CWA's requirements for stormwater •
9:15	- Depart from Bus Loop south of GFHS Fieldhouse - Drive to Multi-sports Complex	• Discuss and observe construction BMP's • Municipal Separate Storm Sewer System which addresses storm water runoff
10:00	West Bank Park	• Walk on River's Edge Trail and discuss and observe storm drain system infrastructure and find outlets • Explain how illicit discharge is detected using robotic camera and other tests (point source pollution)
11:00	Head to Gibson Park -	• Students will walk on the Central Avenue bridge to Gibson Park and observe outlets along the river • Eat lunch at Gibson Park
12:00	Downtown Great Falls	• Get with groups and walk to designated area to place storm drain markers in downtown Great Falls
1:00	Meet back at Gibson Park to catch bus	Go back to GFHS
1:20	Walk around the GFHS neighborhood and see first hand where storm water goes in our community. Place storm drain markers in the area.	• We will learn about the infrastructure of the storm system around GFHS.
2:15	Students return to 7th period class	

118 markers installed at/near COGF storm inlets

~60 students from GFHS science classes over 2 days

https://almetek.com/product/aluminum-storm-drain-markers/

Planning & Community Development
Room 112
2 Park Drive South
Great Falls, MT 59401

July 18, 2022

Dear Lawn Care and Landscape companies,

Summer is upon us and the City wants to give a friendly reminder to all the hard working yard/lawn care, and landscape companies out there to please not blow or dispose of any yard debris, etc onto the public sidewalks, streets, and/or neighboring properties. All lawn clippings, yard debris, fertilizers, etc. should remain on or be relocated onto the property of origin and/or properly disposed of.

When depositing yard debris on the public right of way, it directly affects the neighborhood and is considered a Criminal Public Nuisance under OCCGF §8.50.040. The Official Code of the City of Great Falls §8.51.040 states conditions prohibited on the right-of-way within the incorporated City limits includes any accumulation of dirt, litter, debris, rubbish, weeds, or any other kind of waste or unsanitary material of any kind.

The City's storm drain system collects storm water drainage from the entire City and directly discharges it to our local waterbodies (Missouri River, Sun River, and Sand Coulee Creek). When debris of any kind enters the storm drainage system it not only creates additional maintenance requirements/challenges for City crews but it also impacts the water quality in our local waters where many of us enjoy participating in recreational activities.

Additionally, as defined by the Montana Department of Environmental Quality (MT DEQ) an illicit discharge is "any discharge to a municipal separate storm sewer that is not composed entirely of storm water…". Consequently, any lawn clippings, yard debris, trash, fertilizers, etc. that enter the public right-of-way (i.e. streets, sidewalks, curb and gutters, etc.) would constitute an illicit discharge and would be in direct violation of the Official Code of the City of Great Falls (OCCGF, §13.2.160). Furthermore, §8.8.080, §8.8.120, and §8.9.030 of the OCCGF reference requirements pertaining to proper storage, transport, and disposal of these types of refuse/waste.

Please do your part to help prevent potential pollutants /contaminants from entering the storm drain system and ultimately our treasured local water bodies, and be respectful of keeping our wonderful City and properties beautiful.

Thank you and please feel free to contact the City's Planning and Community Development Department, Heather Rohlf (406-455-8574) or Environmental Division, Nathan Besich (406-727-8390) with any questions or concerns.

Sincerely,

Heather Rohlf

Heather Rohlf, Code Enforcement City of Great Falls
Building Inspectors Office

Nathan Besich

From: Nathan Besich
Sent: Wednesday, February 1, 2023 11:24 AM
To: Jack Wang
Subject: FW: GF College MSU Science Fair info
Attachments: Statistics.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

--Nate

From: Toni Quinn <toni.quinn@gfcmsu.edu>
Sent: Tuesday, January 24, 2023 1:58 PM
To: Nathan Besich <nbesich@greatfallsmt.net>
Subject: FW: GF College MSU Science Fair info

Hi Nathan,

Charla provided data from last year's science fair as well as previous years' information. This info is on the science fair itself, not the science fun portion. I believe most of the elementary school students run through the science fun tables (2 and 3 times in some cases). It is definitely a stress reliever after the science fair project judging for these kids. Last year we had 11 booths besides yours. As with so much, we are still building our numbers back from the pandemic here – we held a virtual science fair is 2021. Will be interesting to see what our numbers look like this year.

Toni Quinn | Academic Affairs Coordinator
Office 406.771.2268
2100 16th Avenue South
Great Falls, MT 59405
toni.quinn@gfcmsu.edu

From: Charla Merja <charla.merja@gfcmsu.edu>
Sent: Tuesday, January 24, 2023 11:23 AM
To: Toni Quinn <toni.quinn@gfcmsu.edu>
Subject: FW: GF College MSU Science Fair info

Here's all the data from last year. I also attached previous years' information.

Middle School
Projects – 158
Students – 228

High School
Projects – 65
Students – 86

Elementary School
Projects – 34
Students - 43

Each judge was assigned 6-10 projects.

29 Schools Attended over both days

Volunteers – 18 campus workers
Teachers – 26 schools represented

The judges were asked to visit with the students, listen to their presentations, ask questions and then evaluate the projects on:
Middle School
Scientific Thought or Engineering
Clarity
Creative Ability
Thoroughness
Workmanship/Design/Organization

High School
Research Problem
Design & Methodology
Execution: Data Collection, Analysis & Interpretation
Creativity
Poster
Interview

Nathan Besich

From: Nathan Besich
Sent: Friday, January 13, 2023 3:44 PM
To: Jack Wang
Subject: RE: World of Work 2022

Awesome! Thank you for tracking this down

--Nate

From: Jack Wang <jwang@greatfallsmt.net>
Sent: Friday, January 13, 2023 2:45 PM
To: Scott Wolff <swolff@GreatFallsChamber.org>
Cc: Nathan Besich <nbesich@greatfallsmt.net>
Subject: RE: World of Work 2022

Thank you Scott! These figures are great!

Jack

From: Scott Wolff <swolff@GreatFallsChamber.org>
Sent: Friday, January 13, 2023 2:40 PM
To: Jack Wang <jwang@greatfallsmt.net>
Cc: Nathan Besich <nbesich@greatfallsmt.net>
Subject: RE: World of Work 2022

Jack,

63 Business
~2,100 students
20 schools
4 counties represented

I hope that helps, and I hope we can count on your participation on 9/26/2023!!

Scott

From: Jack Wang <jwang@greatfallsmt.net>
Sent: Friday, January 13, 2023 2:19 PM
To: Scott Wolff <swolff@GreatFallsChamber.org>
Cc: Nathan Besich <nbesich@greatfallsmt.net>
Subject: World of Work 2022

Hi Scott,

My name is Jack. I am with the City of Great Falls Environmental Division.

I was wondering if you can provide me some information on Worlds of Work from last year, specifically:

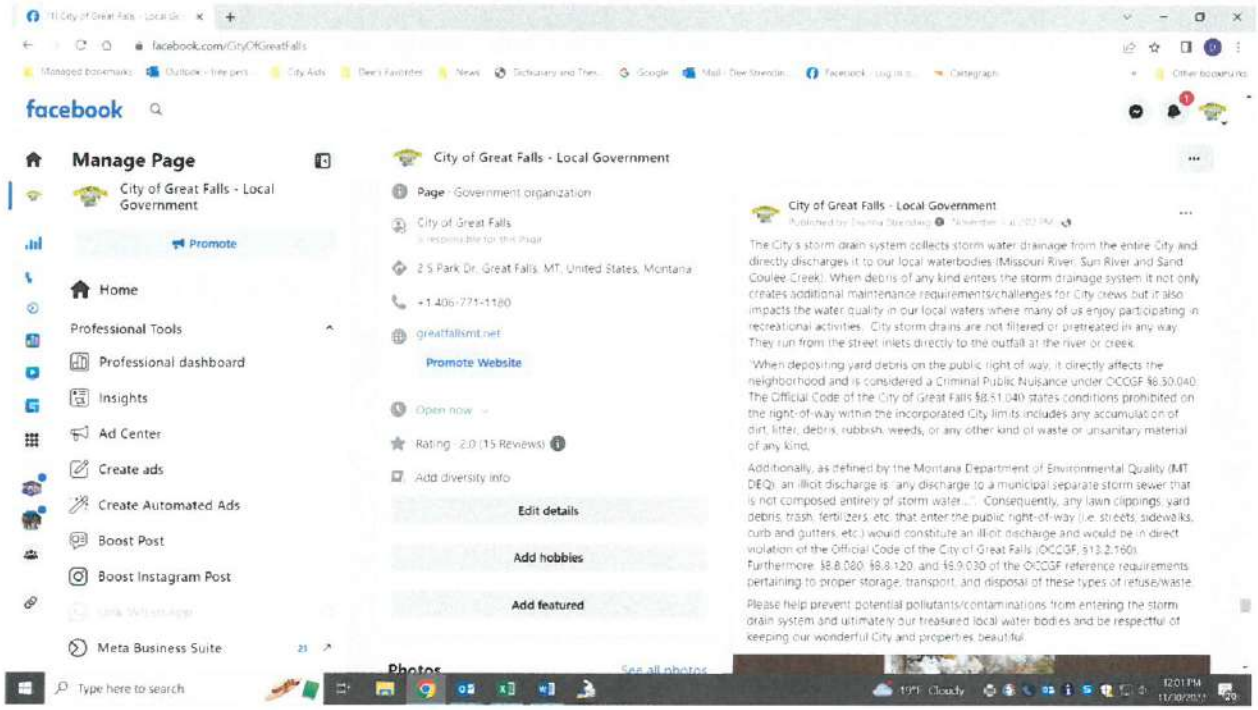
1) How many students attended the event?

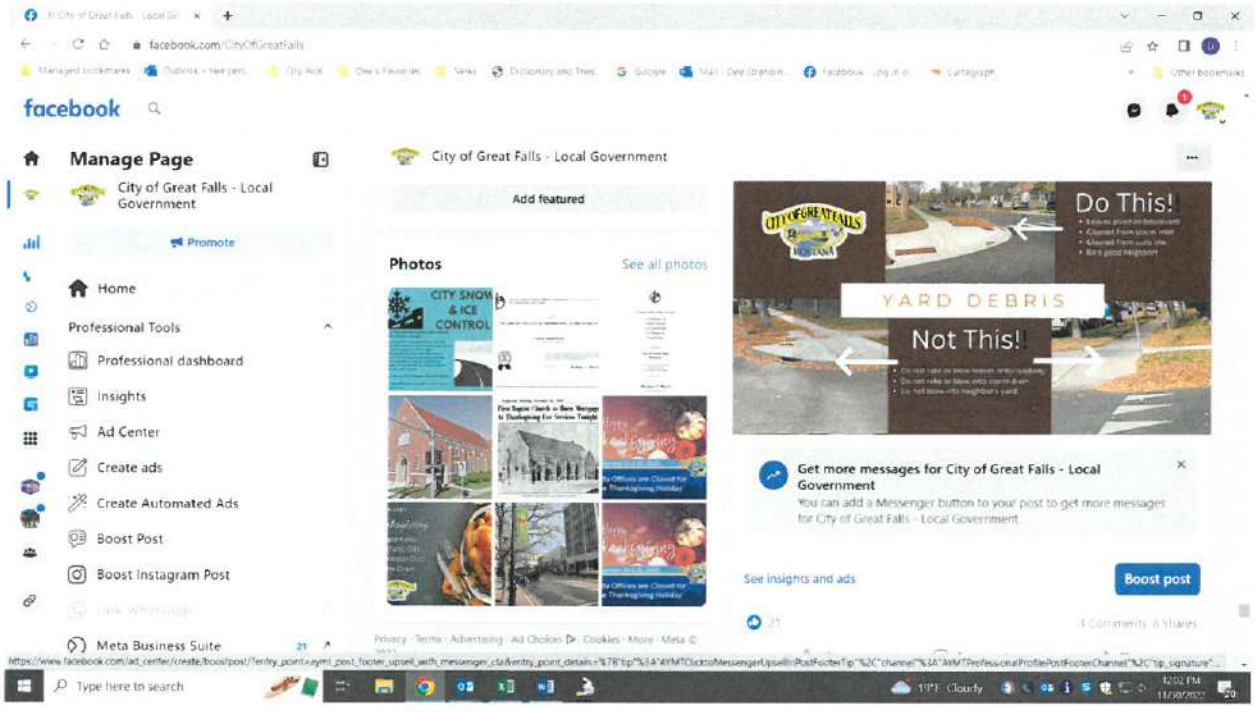
2) How many businesses participated?

My division is putting together an outreach report for 2022 and those figures would be very helpful to us.

Thank you,

Jack (Mujen) Wang
Environmental Division Program Specialist
City of Great Falls – Public Works
1005 25th Ave NE
Great Falls, MT 59404
(406) 455 8147


facebook
Manage Page
City of Great Falls - Local Government
Promote
Home
Professional Tools
Professional dashboard
Insights
Ad Center
Create ads
Create Automated Ads
Boost Post
Boost Instagram Post
Meta Business Suite
City of Great Falls - Local Government
Page · Government organization
City of Great Falls
2 S Park Dr, Great Falls, MT, United States, Montana
+1 406-771-1180
greatfallsmt.net
Promote Website
Open now
Rating · 2.0 (15 Reviews)
Add diversity info
Edit details
Add hobbies
Add featured
Photos
See all photos
City of Great Falls - Local Government
The City's storm drain system collects storm water drainage from the entire City and directly discharges it to our local waterbodies (Missouri River, Sun River and Sand Coulee Creek). When debris of any kind enters the storm drainage system it not only creates additional maintenance requirements/challenges for City crews but it also impacts the water quality in our local waters where many of us enjoy participating in recreational activities. City storm drains are not filtered or pretreated in any way. They run from the street inlets directly to the outfall at the river or creek.
When depositing yard debris on the public right of way, it directly affects the neighborhood and is considered a Criminal Public Nuisance under OCCGF §6.50.040. The Official Code of the City of Great Falls §8.51.040 states conditions prohibited on the right-of-way within the incorporated City limits includes any accumulation of dirt, litter, debris, rubbish, weeds, or any other kind of waste or unsanitary material of any kind.
Additionally, as defined by the Montana Department of Environmental Quality (MT DEQ), an illicit discharge is "any discharge to a municipal separate storm sewer that is not composed entirely of storm water..." Consequently, any lawn clippings, yard debris, trash, fertilizers, etc. that enter the public right-of-way (i.e. streets, sidewalks, curb and gutters, etc.) would constitute an illicit discharge and would be in direct violation of the Official Code of the City of Great Falls (OCCGF, §13.2.160). Furthermore, §8.8.080, §8.8.120, and §8.9.030 of the OCCGF reference requirements pertaining to proper storage, transport, and disposal of these types of refuse/waste.
Please help prevent potential pollutants/contaminations from entering the storm drain system and ultimately our treasured local water bodies and be respectful of keeping our wonderful City and properties beautiful.

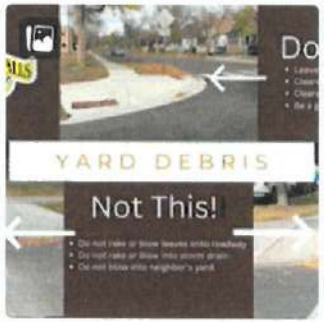

facebook
Manage Page
City of Great Falls - Local Government
Promote
Home
Professional Tools
Professional dashboard
Insights
Ad Center
Create ads
Create Automated Ads
Boost Post
Boost Instagram Post
Meta Business Suite
City of Great Falls - Local Government
Add featured
Photos
See all photos
CITY SNOW & ICE CONTROL
Do This!
YARD DEBRIS
Not This!
Get more messages for City of Great Falls - Local Government
You can add a Messenger button to your post to get more messages for City of Great Falls - Local Government.
See insights and ads
Boost post

(1) City of Great Falls - Local Go... | Meta Business Suite

business.facebook.com/latest/insights/content?asset_id=212375215565303&nav_ref=profile_plus_profile_left_nav_button

Managed bookmarks | Outlook - free pers... | City Aids | Dee's Favorites | News | Dictionary and Thes... | Google | Mail - Dee Strendin... | Facebook - Log in o... | Cartegraph | Other bookmarks

Back to content



Boost post

The City's storm drain system collects storm water drainage from the entire ...

November 3, 2022 at 2:02 PM

ID: 454624553478715

Interactions

28 reactions | 9 comments | 8 shares

Performance

Reach

Total
1,930

Worst — Best

This post reached more people than 76% of your 50 most recent Facebook posts and stories.

Reach	1,930

Reactions, comments and shares

Total
45

Worst — Best

This post received more reactions, comments and shares than 72% of your 50 most recent Facebook posts and stories.

Reactions	28
Comments	9
Shares	8

Results

Total
--

Link clicks	--

Type here to search

19°F Cloudy

12:00 PM
11/30/2022

Year Complete	Visit Type	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	New Facility	13	1	1	1		2		2	3	2		1	
2022	Annual	70				15	20		4	31				

City of Great Falls Utilities F.O.G. (Fats, Oil, & Grease)Program Manual and Management Policy

Great Falls F.O.G. Program

Introduction

According to the National Restaurant Association; used cooking grease in wastewater discharged from restaurants are causing **Fats**, **Oil**, and **Grease** (**FOG**) blockages in sewer lines. FOG is a substance that is created from food scraps and waste, or petroleum waste. When the wastewater from food service facilities contains grease, the hot water and soap used in washing dishes and equipment emulsifies or breaks up the grease, allowing it to flow freely through the sewer. As the wastewater cools, the grease congeals and forms clumps that stick to the sewer lines causing backups and overflows of raw sewage. These grease blockages can cause back-ups into kitchens or basements, or can lead to Sanitary Sewer Overflows (SSOs) which can cause untreated sewage to flow onto streets and travel to storm drains, and into the Missouri River. SSOs have become the focus of many large lawsuits and are being reported to Congress by the EPA. This has made the control of grease blockages a high priority for the EPA, who are now requiring municipalities to adopt FOG Control Programs that include controlling FOG discharge from restaurants.

August 3rd of 2010, the City of Great Falls adopted an ordinance providing the authority for an outline of the FOG Sector Control Program. On April 14, 2014, the City entered into a Consent Decree agreement with the United States Environmental Protection Agency (EPA) and Montana Department of Environmental Quality (MDEQ) as a resolution to pending formal environmental regulatory enforcement under the Federal Clean Water Act. The Consent Decree resolved alleged violations that the City was not appropriately implementing the Industrial Pretreatment Program and other alleged violations related to operation and maintenance of the wastewater collection system. The Consent Decree required the City to develop and implement a Capacity, Management, Operational, and Maintenance (CMOM) program to address SSOs. The CMOM program concluded that many of the SSOs experienced were associated with FOG accumulation in the sewer collection system. As such, the Consent Decree required that a component of the CMOM program included implementation of a program that more rigorously regulates discharges of FOG to the sewer collection system.

The City of Great Falls adopted a Fats, Oils, and Grease (FOG) Control and Pretreatment Program to assist with FOG prevention. The provisions of the program are applicable to dischargers and to the potential introduction of pollutants into treatment works resulting from the production or use of Fats, Oils and Grease. The types of establishments this program applies to include, but are not limited to Brewery Pubs, Butcher Shops, Churches, Commissaries, Grocery Stores, Mobile Food Units, Hotels/Motels, Nursing Homes, Department Store Eateries, Cinemas, Café's, Coffee Shops, Smoothie and Juice Shops, Ice Cream Shops, Fairground Eateries, Rented Commercial Kitchens, and Restaurants (All Types).

The City spends thousands of dollars per month to perform extra maintenance on its sewer system due to excess FOG. Grease removal devices like interceptors, hydro-mechanical grease traps and other BMPs are designed to prevent grease related problems in the sanitary sewer. This manual provides the City's FOG control program requirements in accordance with the Official Code of the City of Great Falls and federal requirements. Also included is information about FOG and an informative poster and educational information for your facility and staff. The City of Great Falls wants to work with business owner and managers to prevent FOG problems from affecting businesses and the community's sewer system. Please direct any questions regarding this program to the Sector Control Compliance Technician at (406) 727-8390.

Great Falls F.O.G. Manual

Management Policy

The City's FOG Management Policy is provided for within the Official Code of the City of Great Falls (OCCGF) at 13.12.090, "Sector Control Program." This section of the OCCGF provides authority for the City to establish programs (Management Program) to control specific pollutants discharged to the sanitary sewer in order to prevent the introduction of pollutants into the Publicly Owned Treatment Works (POTW) that will interfere with the operation of the POTW.

Section 13.12.090 further provides authority for the City to:

- Require closure of plumbing, treatment devices and other system components when they are no longer required.
- Issue variances to requirements to install grease interceptors, hydro-mechanical grease traps and other Best Management Practices (BMPs) as appropriate.
- Provide compliance and enforcement of the program requirements.
- Control pollutants (in this case FOG) using Best Management Practices(BMPs).
- Review new facilities and facilities undergoing any physical change(s), change in ownership, change in operation, or other change that could affect the nature of the wastewater discharged.
- Require facilities to notify the City prior to specific events.

Program Description and Implementation

Under this program City personnel or authorized agents will:

- Require and conduct review of control devices for new, modified and existing facilities.
- Make site visits to provide education materials, outreach, and technical assistance.
- Conduct onsite compliance inspections to review facility compliance with this program.
- Provide compliance feedback and take appropriate enforcement action in accordance with the City's Industrial Pretreatment Enforcement Response Plan.

Device Requirements

- All new and modified food service establishments, or other industrial or commercial enterprises shall provide grease removal devices and or BMPs.
- Grease control devices will be required for existing facilities when, in the opinion of the City, they are necessary to prevent excessive amounts of FOG from entering the POTW in amounts that interfere or disrupt POTW operation.
- FOG pretreatment devices must be sized and configured according to common engineering standards in order to prevent discharge of FOG that will interfere or disrupt POTW operation.
- All FOG pretreatment devices shall be located so that maintenance and inspections can be easily performed. The refusal of any FOG facility to allow City personnel entry for inspection will be considered a violation of this policy and City Ordinance 13.12.010 (G) Right of Entry.
- The FOG pretreatment device manufacturer's recommendations or this document's requirements (whichever is more stringent) must be followed for installation and maintenance.
- Based upon review of all relevant information, the City may require installation, repair, modification, or replacement of FOG pretreatment device.

Great Falls F.O.G. Manual

Device Operation and Maintenance Requirements and Prohibitions

FOG device maintenance is the responsibility of the user, or the owner in the case of multiple users. The following FOG pretreatment device maintenance requirements and prohibitions apply.

- Devices shall be maintained to eliminate discharge of FOG concentrations that will result in obstruction in the sewer or otherwise result in interference with operation of the POTW.
- All large-volume (greater than 600 gallon) grease control interceptors shall be serviced necessary to maintain minimum design capacity. Accumulation of floatable and/or settled waste shall not exceed 25% of the total volume of the interceptor unless otherwise recommended in writing by the device manufacturer.
- All small hydro-mechanical grease control devices (less than 600 gallons) shall be serviced as required to maintain minimum design capacity.
- The use of enzymes, detergents, or other emulsifying additives to prevent the accumulation of FOG in any grease control pretreatment device (interceptor or hydro-mechanical grease trap) is prohibited.

Record Keeping and Notifications Requirements

Records to Keep: The following records shall be maintained on-site for 3 years and available for inspection upon request:

- FOG pretreatment device cleaning maintenance log books or forms. Information retained shall include facility name, location, date, time of cleaning, type of device cleaned, person or company performing the service, and signature of facility personnel confirming service completion.
- Pretreatment device cleaning/maintenance haul manifests.
- FOG training records including date, duration of training, location, initials of the trainer, attendees and FOG training topic.
- Pretreatment device capacity monitoring log including date, time,device name or description and initials of person taking the measurement.

Notifications: All FSEs must notify the City Public Works Department in writing, at the address below, 30 days prior to the following events:

Sector Control Program
Public Works - Environmental Division
PO Box 5021
Great Falls, MT 59403

- Sale or transfer of ownership of the business.
- Change in trade name under which the business is operated.
- Change in the nature of the services provided or devices operated that affect the potential to discharge FOG.
- Submittal of plans to Building and Zoning to remodel the facility or a new facility.
- Facility closure.

Great Falls F.O.G. Manual

Storm Drains

- Keep FOG from polluting the storm drain system and rivers.

Exhaust Hood System

- Inspect the exhaust system to prevent grease build up for Fire Prevention.
- Clean vent hoods and filters on a regular basis or hire a service company to maintain the exhaust system.
- Maintain the grease containment system that catches the excess grease that travels from your hoods and onto your rooftop. The container should be noncombustible, closed off to rain.

Great Falls F.O.G. Manual

Frequently Asked Questions

What is F.O.G.?

FOG is short for Fats, Oils, and Grease. FOG is found in many foods; such as meats, sauces, salad dressings, foods cooked in deep fat fryers, cookies, pastries, dairy products, coffee syrups and creamers and many, many more.

Why is FOG a problem?

FOG in the sanitary sewer system coats the insides of the pipes, causing maintenance problems. The consequences include reduced sewer capacity and pipe blockages which can lead to sanitary sewer stoppages and overflows. These overflows are public health and environmental hazards, as well as a financial burden to residents, businesses, and the City. FOG can also damage equipment and accessories vital to the proper operation of the wastewater utility.

What is the difference between a Hydro mechanical grease trap and a grease interceptor?

The two significant differences between them is size and location. A hydro mechanical grease trap is a small device that is located inside the facility and generally placed under a sink. A grease interceptor is a vault with a minimum capacity of around 600 gallons and some can exceed 2000 gallon capacity. These devices are generally buried outside the facility and in the ground. Both are designed as a holding device that allows the fats, oils, and grease to separate from the water, congeal, and rise to the surface to be removed rather than be introduced into the sewer system.

I don't use grease; do I still need a hydro mechanical grease trap/interceptor?

You may. Even if you don't fry foods, your restaurant/business is still contributing to the FOG problem if you don't have proper preventive devices in place and maintained. Washing dishes and silverware, or food preparation utensils, adds FOG waste to the City sewer system.

Who determines if I need a hydro mechanical grease trap/interceptor?

During new construction or remodel, you may be required to install a hydro mechanical grease trap or grease interceptor in accordance with the current plumbing code.

Existing businesses may be required to install an appropriately sized grease control device if the City determines this requirement is due to:

- Increased cleaning frequency of the City sewer , to remove oil/grease obstruction or interference or ;
- A Sanitary Sewer Overflow (SSO) was attributed to a user's discharge and/or has caused or has the potential to cause an SSO due to discharge of oil and grease entering into the City sewer system.

What are BMPs?

BMP stands for Best Management Practice. BMPs are useful for reducing the amount of FOG that goes down the drain, thereby reducing the risk of clogged pipes and sanitary sewer overflows. A great example of a BMP is wiping excess grease and food wastes out of pots, pans, and dishes before washing them.

Great Falls F.O.G. Manual

Technical Assistance

How to Clean a Hydro mechanical Grease Trap

1. Never enter a grease trap without the appropriate confined spaceprecautions.
2. Measure device contents to determine if capacity is less than 25%.
3. Schedule trap cleaning prior to the start of the business day.

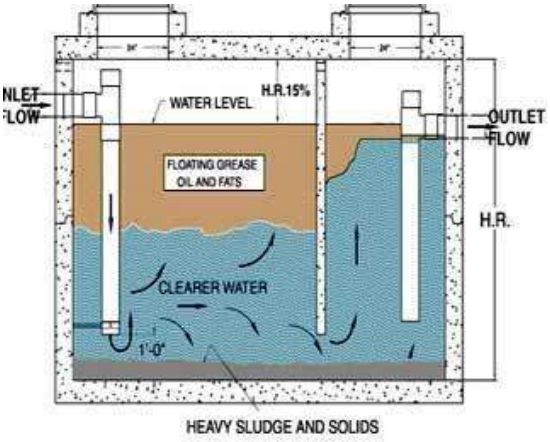
   (Grease will be congealed and easier to remove when the grease trap is cold.)
4. Remove access lid.
5. Remove and clean screening device, if applicable.
6. Using a dedicated scraping device, clean sidewalls and baffle plates. Putgrease in a sealed bag or container, and discard in the garbage.
7. Using a mesh-type screening device or screen, skim all floating grease, leaving the water behind. Put grease in a sealed bag or container, and discardin the garbage.
8. Remove build-up of food particles at the bottom if necessary. Liquid wastehaulers are usually hired to vacuum the unit empty.
9. Fill with **cold** water.
10. Replace screening device and ensure access lid is airtight.
11. Record the cleaning on the maintenance log form or log book.

Great Falls F.O.G. Manual

Technical Assistance

How to Clean a Grease Interceptor

1. Schedule a cleaning when an employee of your establishment can be presentto ensure that the interceptor is cleaned properly.
2. Never enter a grease interceptor without the appropriate confined spaceprecautions.
3. Measure device contents to determine capacity is less than 25%
4. Plug outlet or use other measures to ensure material does not exit the greaseinterceptor into the sewer during the cleaning process.
5. Pump grease interceptor dry and scrape or pressure wash walls and bafflesto remove grease each time the interceptor is pumped out.
6. Recharge the Grease Interceptor with **cold** clean water from **within** the establishment (**not** by decanting water from the pumping truck back into theinterceptor). The clean water will ensure that grease is trapped when you begin using the interceptor again after the pumping operation.
7. Always ask for a manifest or receipt from the pumping company for each interceptor cleaning. Keep copies of these available for City inspection, alongwith the cleaning log.
8. Limit unscheduled cleanings by using kitchen Best Management Practices (BMPs), as advised within this manual.



Great Falls F.O.G. Manual

Best Management Practices (BMP)

Do's

1. **DO** train new employees in BMP's including the proper disposal of FOG, and provide periodic training.
2. **DO** display appropriate "NO GREASE" signage inprominent work area location.
3. **DO** install screens on all work area drains with maximum 3/16" openings. Screens should be removable for cleaningand clean screens frequently.
4. **DO** provide a covered recycling container for cooking grease (yellow grease) and cooking oil. Utilize the service of a recycling company for disposal and maintain a disposal log.
5. **DO** scrape or dry-wipe excess grease from cooking pots, pans, and utensils then dispose in trash.
6. **DO** dispose of food waste by recycling or in solid wastedisposal.
7. **DO** maintain well-marked and accessible spill kits absorbent material for spills.
8. **DO** maintain floors and other work areas with access to building sewer drains and piping free of FOG.
9. **DO** call 406-727-8390 for additional BMP information.

Don'ts

1. **DON'T** put hot water with a temperature over 140 degreesFahrenheit down any drain that is connected to a grease trap or interceptor.
2. **DON'T** pour FOG (salad oils, butter, shortening, grease, cooking oil, soups, etc.) down your kitchen drains.
3. **DON'T** put enzymes or other additives directly into grease interceptor/trap in an attempt to reduce cleaning schedule.
4. **DON'T** overfill recycling containers
5. **DON'T** remove screens from drains
6. **DON'T** use water to spray down grease spills into anoutside drain.
7. **DON'T** clean greasy equipment outside.
8. **DON'T** dump mop water outside.

IT'S TIME TO FIGHT F.O.G.

Help keep Fats, Oils & Grease from clogging the sewer pipes!

CITY OF GREAT FALLS MONTANA

THE RIGHT WAY

Wipe dishes, pots, pans and cooking equipment before rinsing or washing.

Put food waste into food compost container or trash.

Collect waste oil and store in Tallow Bin for recycling. *Clean up spills immediately.*

Wash floor mats in a utility sink.

Keep screens in all drains to catch food waste.

THE WRONG WAY

Do not pour cooking residue into the drain.

Do not put food waste down the drain.

Do not pour cooking oil into the drain.

Do not wash floor mats outside.

Do not remove screens from drains.

Cleaning Maintenance interceptor/trap Log

Business Name:

Date	Maintenance Performed	Performed By	Initials

MCM-3 ATTACHMENTS

COGF has evaluated the following non-stormwater discharges in order to determine if they are a significant contributor of pollutants to the City's storm drain system and its receiving waters.

1. Water line & hydrant flushing
    a. Associated pollutant(s): Chlorine, TSS
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): YES
    d. Local Control(s): Contractors required to obtain MT DEQ Disinfected Water Permit, COGF SOPs
2. Landscape Irrigation, Irrigation Water, Lawn Watering
    a. Associated pollutant(s): Nutrients
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): None; no history of observed issues
3. Discharges from Potable Water Sources
    a. Associated pollutant(s): Chlorine, nutrients
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): None; no history of observed issues
4. Rising Groundwater, Flows from Riparian Habitats and Wetlands, Diverted Stream Flows, Springs
    a. Associated pollutant(s): varied depending on location and source of water
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): None; no history of observed issues
5. Uncontaminated Groundwater Infiltration
    a. Associated pollutant(s): varied depending on location and source of water
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Controls: COGF inspection & maintenance schedule / repairs
6. Uncontaminated Pumped Groundwater
    a. Associated pollutant(s): varied depending on location and source of water
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): YES
    d. Local Control(s): Requirement to obtain MT DEQ Dewatering Permit
7. Foundation Drains, Water from Crawl Space Pumps, Footing Drains
    a. Associated pollutant(s): varied depending on location and source of water
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): YES
    d. Local Control(s): COGF requires analytical testing prior to discharge approval
8. Air Conditioning Condensation
    a. Associated pollutant(s): none
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): None, no history of observed issues
9. Individual Residential Car Washing
    a. Associated pollutant(s): Wash water, soaps, oil & grease, etc.
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO

    d. Local Control(s): None, no history of observed issues
10. Dechlorinated Swimming Pool Discharges
    a. Associated pollutant(s): Chlorine
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): must infiltrate on property or receive approval from COGF for discharge
11. Street Wash Water
    a. Associated pollutant(s): TSS, nutrients, oil & grease
    b. Significant contributor of pollutants (yes/no): NO
    c. Addressed as illicit discharge (yes/no): NO
    d. Local Control(s): COGF SOPs

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2201 IDDE	3/4/2022	2/25/2022	NO	Other	Enforcement L1

Response Notes

1-14-2022- Richard Fertterer called David Grosse with City Planning and said an excessive amount of water was flowing onto his property from the alley. David went to the described location, which was 1921 11th Ave So. The location was a site with some construction activities going on. David called Mike Tabacco Construction as they were the company doing the work on site. David again called and left a message with Mike on 1-18-2022. David then heard nothing and then notified City Environmental staff. On 1-19-2022, Mike told David his employee was instructed to put down wattles to slow the flow coming off the site and filter sediment in the case of another storm happening. David asked to be provided with pictures that wattles were installed. Some snowmelt was occurring during a TCO meeting onsite, David said he observed no water entering the neighbor’s property and said he say no discernable runoff. This IDDE was closed as of 2-25-2022.

Photo 1

Photo shows area near new building where some runoff may have occurred.

Photo 2

Photo shows alley near area where runoff occurred at the site.

Photo 3

View of neighboring property where runoff supposedly ran onto.

Photo 4

Photo shows alley way show little runoff, but not entering the neighboring property.

Investigator: David Grosse

Location: 1921 11th Ave. So.

Weather: Sunny and cold

Camera: Unknown

Environmental Illicit Discharge Report

Date: 1-14-2022

Incident ID: 2201

1-14-2022- Richard Fertterer called David Grosse with City Planning and said an excessive amount of water was flowing onto his property from the alley. David went to the described location, which was 1921 11th Ave So. The location was a site with some construction activities going on. David called Mike Tabacco Construction as they were the company doing the work on site. David again called and left a message with Mike on 1-18-2022. David then heard nothing and then notified City Environmental staff. On 1-19-2022, Mike told David his employee was instructed to put down wattles to slow the flow coming off the site and filter sediment in the case of another storm happening. David asked to be provided with pictures that wattles were installed. Some snowmelt was occurring during a TCO meeting onsite, David said he observed no water entering the neighbor's property and said he say no discernable runoff. This IDDE was closed as of 2-25-2022.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2202 IDDE	3/4/2022	3/4/2022	NO	Sediment	Enforcement L1

Response Notes

1-14-2022- Nate and Johnny got a call that contractors working on a project at 309 Central Avenue were allowing sediment to leave the site. When they arrived they found the area that had been described. Nate and Johnny told employees of Falls Mechanical that sediment could not leave the site or be allowed into storm drain. This site was visited a couple times after initial incident and no sediment was observed leaving the area. As of 3-4-2022, this IDDE is considered closed.

Photo 1

Photo shows sediment laden water from construction site running off into the alley way.

Photo 2

Photo shows the storm drain in the alley. It appears that some of the sediment laden water may have entered the storm drain.

Photo 3

Photo shows water running into alley on left side of photo into the alley.

Photo 4

Sediment laden water in alley way moving toward storm drain inlet, which is located near the vehicle shown in photo.

Investigator: Besich/Cavill

Location: 309 Central Ave.

Weather: 33 and Partly Cloudy

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 1-14-2022

Incident ID: 2202 IDDE

1-14-2022- Nate and Johnny got a call that contractors working on a project at 309 Central Avenue were allowing sediment to leave the site. When they arrived they found the area that had been described. Nate and Johnny told employees of Falls Mechanical that sediment could not leave the site or be allowed into storm drain. This site was visited a couple times after initial incident and no sediment was observed leaving the area. As of 3-4-2022, this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
30060	3/4/2022	3/22/2022	NO	Petroleum	Enforcement L1

Response Notes

3-3-2022- Nate was contacted by Launa Fallat, that there was a barrel of oil in the alley at 615 6th Avenue North, with no cap on it. June Deloy was the caller, her phone number is 406-217-4300. The individual who put the barrel in the alley is Charles Fern who live at 605 6th Avenue North. June views this as hazardous. Nate mentioned that it hasn't spilled and that the Environmental Division or Sanitation are not in the business of collecting potentially hazardous waste and taking responsibility for it. Nate reached out to Mr. Fern and informed him that we don't collect or dispose of this type of stuff and that he needs to move it back to his property and not allow it to spill. That evening the barrel was reported to have been tipped over.
3-4-2022- We went to investigate the barrel that had been tipped over. Upon arrival, we found some had been spilled on alley way surface. There was absorbent material that had been put down on the spilled material. The oil was nowhere near a storm inlet.
3-7-2022- June called again complaining that the barrel of oil was still in the alley. Justin and Mike Linn went to the location to see if any of the contents in the barrel had spilled. After arriving we found no oil had been spilled or dumped into garbage as had been described. Justin called Charles and left a message at 10:50 A.M.
3-10-2022- June called again saying that nothing had been done with the barrel in the alley.
3-16-2022- Justin drove by the barrel and observed that it was still there. Again Charles was called but did not answer.
3-21-2022- June again called. Nate told June we have tried contacting Charles, but never got an answer or had our calls returned. At 9:49 A.M., Nate attempted to contact Charles again, asking him to remove the barrel and properly dispose of it. And if he did not hear back from him we would seek escalated enforcement. At 12:34 P.M., Charles called and left a message saying he moved the barrel onto his property and will be looking for ways to properly dispose of it.
3-22-2022- Justin drove by the location of the oil barrel. The barrel was gone from the alley and no signs of any further spills. This IDDE is considered closed as of 3-22-2022.

Photo 1

Photo shows barrel of oil that had been placed in alleyway.

Photo 2

Photo shows that barrel had been tipped over. No oil reached any street or storm drain inlet.

Photo 3

Another shot of the spilled oil in the alley. At the top of the photo you can see up turned soil where barrel was drug out to the ally from adjacent property.

Photo 4

Closer look at where the oil barrel was drug out into alley from adjacent property.

Investigator: Doll/Besich

Location: 605 6th Ave N

Weather: Varying

Camera: Various

Photo 5

View of area with spilled oil. Absorbent material had been put down on the spilled area to soak up as much of the pooled oil as possible.

Photo 6

Oil barrel is shown still in alley. Stained soil can be seen near barrel.

Photo 7

Photo shows the barrel had been removed from the alley way. Most of the stained soil had been removed from the area as well.

Photo 8

Photo shows that barrel had been taken back on to the adjacent property from which initially came from.

Investigator: Doll/Besich

Location: 605 6th Ave N

Weather: Varying

Camera: Various

Environmental Illicit Discharge Report

Date: 3-3-2022

Incident ID: 2203 IDDE

3-3-2022- Nate was contacted by Launa Fallat, that there was a barrel of oil in the alley at 615 6th Avenue North, with no cap on it. June Deloy was the caller, her phone number is 406-217-4300. The individual who put the barrel in the alley is Charles Fern who live at 605 6th Avenue North. June views this as hazardous. Nate mentioned that it hasn't spilled and that the Environmental Division or Sanitation are not in the business of collecting potentially hazardous waste and taking responsibility for it. Nate reached out to Mr. Fern and informed him that we don't collect or dispose of this type of stuff and that he needs to move it back to his property and not allow it to spill. That evening the barrel got tipped over.

3-4-2022- We went to investigate the barrel that had been tipped over. Upon arrival, we found some had been spilled on alley way surface. There was absorbent material that had been put down on the spilled material. The oil was nowhere near a storm inlet.

3-7-2022- June called again complaining that the barrel of oil was still in the alley. Justin and Mike Linn went to the location to see if any of the contents in the barrel had spilled. After arriving we found no oil had been spilled or dumped into garbage as had been described. Justin called Charles and left a message at 10:50 A.M.

3-10-2022- June called again saying that nothing had been done with the barrel in the alley.

3-16-2022- Justin drove by the barrel and observed that it was still there. Again Charles was called but did not answer.

3-21-2022- June again called. Nate told June we have tried contacting Charles, but never got an answer or had our calls returned. At 9:49 A.M., Nate attempted to contact Charles again, asking him to remove the barrel and properly dispose of it. And if he did not hear back from him we would seek escalated enforcement. At 12:34 P.M., Charles called and left a message saying he moved the barrel onto his property and will be looking for ways to properly dispose of it.

3-22-2022- Justin drove by the location of the oil barrel. The barrel was gone from the alley and no signs of any further spills. This IDDE is considered closed as of 3-22-2022.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2204 IDDE	5/24/2022	5/19/2022	NO	Sediment	Enforcement L1

Response Notes

5-18-2022- Eric Boyd, with the Street Department informed City Environmental of a situation involving Josh Jon’s Construction. The incident was located at 1817 Mountain View Dr. Bryan Gucken reported that Josh was doing some excavating and had a stock pile in the roadway. Also, at the location the backhoe being used had a leaking hydraulic hose and leaked fluid all over the road and the fluid soaked into asphalt. After lunch, Justin and Dan Palagi went to the location. We arrived and Josh was not there. Josh showed up and I told Josh that no sediment or stockpiles were allowed in the street. Justin also mentioned to Josh that he did not have any sediment control BMP’s in place. Josh said he would have the stockpile moved onto the lawn by the end of the day. Dan asked him to clean the hydraulic leak up off the asphalt as the hydraulic fluid damages the asphalt. Dan also told him that in the future, if his backhoe is leaking not to drive all over the place and isolate the leak.
5-19-2022- Justin drove by the location from previous day. The stock pile was no longer in the road and the street had been swept up. As of 5-19-2022 this IDDE is considered closed.

Photo 1

Photo shows the stockpile in roadway as well as mess from the sediment near excavation. Leaking hydraulic fluid can also be seen on asphalt.

Photo 2

Closer look at the excavation, stockpile, and sediment on the roadway.

Photo 3

Photo shows just how much the backhoe was driven around with a hydraulic that was leaking on the asphalt.

Investigator: Doll

Location: 1817 Mountain View Dr.

Weather: Overcast and 60

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 5-18-2022

Incident ID: 2204 IDDE

5-18-2022- Eric Boyd, with the Street Department informed City Environmental of a situation involving Josh Jon's Construction. The incident was located at 1817 Mountain View Dr. Bryan Gucken reported that Josh was doing some excavating and had a stock pile in the roadway. Also, at the location the backhoe being used had a leaking hydraulic hose and leaked fluid all over the road and the fluid soaked into asphalt. After lunch, Justin and Dan Palagi went to the location. We arrived and Josh was not there. Josh showed up and I told Josh that no sediment or stockpiles were allowed in the street. Justin also mentioned to Josh that he did not have any sediment control BMP's in place. Josh said he would have the stockpile moved onto the lawn by the end of the day. Dan asked him to clean the hydraulic leak up off the asphalt as the hydraulic fluid damages the asphalt. Dan also told him that in the future, if his backhoe is leaking not to drive all over the place and isolate the leak.

5-19-2022- Justin drove by the location from previous day. The stock pile was no longer in the road and the street had been swept up. As of 5-19-2022 this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2205 IDDE	6/10/2022	6/10/2022	NO	Sediment	Enforcement L1

Response Notes

6-9-2022- Darren Yatsko came in and said there was a construction company remodeling a hotel at 619 Central Avenue that had a stockpile on the road and tracking dirt all over the place making the area a mess. Justin went to the location and found the foreman and explained why he was there. Justin asked the foreman to sweep the street up to clean up the tracking mess. Justin also asked that BMP’s be implemented while the stockpile was present to prevent any sediment from entering nearby storm drain. The foreman said they would sweep the street and implement BMP’s right away.
6-10-2022- Justin Drove by to follow up on this illicit discharge, the street had been swept up and area with stockpile had been backfilled so no stockpile existed. It appeared that the area around the stockpile had also been swept up as well. As of 6-10-22 this IDDE is considered closed.

Photo 1

Photo shows construction site along Central Avenue that had a stockpile in the roadway as well as tracking coming from the site.

Photo 2

Photo shows tracking coming from the construction site from the east side of the project.

Photo 3

This photo shows the size of stockpile with no BMP's. Tracking can also be seen coming from the construction site entering Central Avenue.

Investigator: Doll

Location: 619 Central Ave.

Weather: Sunny and 75

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 6-9-2022

Incident ID: 2205 IDDE

6-9-2022- Darren Yatsko came in and said there was a construction company remodeling a hotel at 619 Central Avenue that had a stockpile on the road and tracking dirt all over the place making the area a mess. Justin went to the location and found the foreman and explained why he was there. Justin asked the foreman to sweep the street up to clean up the tracking mess. Justin also asked that BMP's be implemented while the stockpile was present to prevent any sediment from entering nearby storm drain. The foreman said they would sweep the street and implement BMP's right away.

6-10-2022- Justin Drove by to follow up on this illicit discharge, the street had been swept up and area with stockpile had been backfilled so no stockpile existed. It appeared that the area around the stockpile had also been swept up as well. As of 6-10-22 this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2206 IDDE	6/13/2022	7/6/2022	NO	Wash Water	Enforcement L1

Response Notes

6-13-2022- Dan Palagi with Streets Department called to inform us that Matt Paton (406-899-6659), called to inform us that there was some sort of liquid that had discharged into the alley. The liquid had a foul smell and that on June 11th a skid steer was observed sweeping in the vicinity. One neighbor had video of a truck dumping a load of dirt on the pooled liquid in the alley, but nothing else was done with the dirt. It was thought that maybe the liquid came from the nearby McDonald's. On June 13th, Justin went to the location and found staining coming from the McDonald's parking area. Justin also found the dirt that was dumped on the liquids to soak it up. Johnny with COGF Environmental Sector Control called the manager of McDonald's to request the area be cleaned up and the dirt could not stay where it was dumped. The manager said the liquid originated from the inside of the building. Manager also mentioned he would work to get the dirt removed. Johnny asked to be notified one the cleanup was conducted.
6-18-2022- Johnny had a message from the McDonald's manager saying the area had been cleaned up. Justin went to the location to verify.
7-6-2022- This IDDE is considered closed.

Photo 1

Photo from neighbor shows liquid running down the alley. Appears to be coming from McDonald's location on left side of photo.

Photo 2

Photo shows that dirt was brought in and dump on liquid in alleyway to soak it up.

Photo 3

Photo shows a skid steer moving dirt around to soak up the liquid running down the alleyway.

Photo 4

Photo shows staining from liquid leaving property and running down the alleyway.

Investigator: Doll

Location: 1703 10th Ave. S.

Weather: 63 and Sunny

Camera: Various

Photo 5

This photo shows where liquid pooled on the side of the alley. It can also be seen where dirt was brought into soak up the liquid.

Photo 6

A closer look at the area the dirt was brought into soak up the liquid. Some staining is present from the liquid.

Photo 7

Photo shows just how far down the alleyway the liquid went. The liquid originated from the wall in the far part of the photo.

Investigator: Doll

Location: 1703 10th Ave. S.

Weather: 63 and Sunny

Camera: Various

Environmental Illicit Discharge Report

Date: 6-13-2022

Incident ID: 2206 IDDE

6-13-2022- Dan Palagi with Streets Department called to inform us that Matt Paton (406-899-6659), called to inform us that there was some sort of liquid that had discharged into the alley. The liquid had a foul smell and that on June 11th a skid steer was observed sweeping in the vicinity. One neighbor had video of a truck dumping a load of dirt on the pooled liquid in the alley, but nothing else was done with the dirt. It was thought that maybe the liquid came from the nearby McDonald's. On June 13th, Justin went to the location and found staining coming from the McDonald's parking area. Justin also found the dirt that was dumped on the liquids to soak it up. Johnny with COGF Environmental Sector Control called the manager of McDonald's to request the area be cleaned up and the dirt could not stay where it was dumped. The manager said the liquid originated from the inside of the building. Manager also mentioned he would work to get the dirt removed. Johnny asked to be notified one the cleanup was conducted.

6-18-2022- Johnny had a message from the McDonald's manager saying the area had been cleaned up. Justin went to the location to verify.

7-6-2022- This IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2207 IDDE	6/27/2022	6/23/2022	NO	Wash Water	Enforcement L1

Response Notes

6-22-22- Justin drove by a location where a contractor had put wash water into the curb line. Justin got out and found the contractor and said that the wash water that was observed in the curb line was not allowed. It was determined to be wash water from dry wall type work. Justin told the contractor that they needed to clean up the area. Justin told them that he would follow up to make sure the area was cleaned up. The contractor did tell Justin that they would clean the area up.
6-23-22- Justin drove by the location of the illicit discharge. It was observed that the contractor had cleaned the area up that contained the illicit discharge. As of 6-23-2022 this IDDE is considered closed.

Photo 1

Photo shows the amount of wash water contractor allowed to enter the curb line of the street.

Photo 2

Another photo of the wash water. It was determined to be wash water from drywall work.

Investigator: Doll

Location: 500 7th Ave N

Weather: Sunny and 76

Camera:

Environmental Illicit Discharge Report

Date: 6-22-22

Incident ID: 2207 IDDE

6-22-22- Justin drove by a location where a contractor had put wash water into the curb line. Justin got out and found the contractor and said that the wash water that was observed in the curb line was not allowed. It was determined to be wash water from dry wall type work. Justin told the contractor that they needed to clean up the area. Justin told them that he would follow up to make sure the area was cleaned up. The contractor did tell Justin that they would clean the area up.

6-23-22- Justin drove by the location of the illicit discharge. It was observed that the contractor had cleaned the area up that contained the illicit discharge. As of 6-23-2022 this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
33207	6/27/2022	6/27/2022	Yes	Petroleum	

Response Notes

6-27-2022- At 8 A.M., Justin was informed that Public Works was notified by dispatch of a fuel spill near the intersection of 1st Avenue North and 9th Street North. Justin went to the location and found that a Republic garbage truck had been hit by a car, causing a hole in the garbage truck's fuel tank. The garbage truck pulled over after being struck by the car and Great Falls Fire and Rescue was dispatched. When they arrived they started putting absorbent material down near the inlet to prevent any more fuel from entering the storm drain. There was some fuel that did enter the storm drain inlet, but a quantity was estimated to be small to minimal. Absorbent material had been put down to soak up remaining amount of fuel in the curb line. When Justin got to the scene a Republic employee was cleaning or sweeping up the used absorbent material. Justin verified that some of the fuel did in fact reach the storm drain. Justin did contact the Fire Dept. to make sure the entire quantity of the spilled fuel didn't enter the storm drain. The Fire Dept., did verify that the entire quantity did not enter the storm drain. Since the Republic employee was cleaning up the material Justin would follow up to make sure everything was cleaned up. Later that afternoon, Justin went to the location to verify the cleanup. Everything had been cleaned up. As of 6-27-2022, this IDDE is considered closed.

Photo 1

Photo shows that there is evidence of fuel was able to reach and enter the storm drain inlet.

Photo 2

Photo shows the area in which fuel was spilled and ran down the curb line towards the storm drain inlet.

Photo 3

Photo shows that absorbent material was put down where spilled fuel was. Responsible party was on scene cleaning absorbent material up.

Photo 4

Photo shows the fuel take that was hit by car causing the tank to leak fuel down the road way and reaching storm drain.

Investigator: Doll

Location: 1st Ave N & 9th St. N

Weather: 62 and Sunny

Camera: DMPV567CJ2D1

Photo 5

This photo shows that a fair amount of fuel pooled up at the corner of the street and adjacent alley.

Photo 6

This photo shows evidence that some of the fuel was able to reach the storm drain. Quantity of fuel that entered storm drain was undetermined.

Investigator: Doll

Location: 1st Ave N & 9th St. N

Weather: 62 and Sunny

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 6-27-22

Incident ID: 2208 IDDE

6-27-2022- At 8 A.M., Justin was informed that Public Works was notified by dispatch of a fuel spill near the intersection of 1st Avenue North and 9th Street North. Justin went to the location and found that a Republic garbage truck had been hit by a car, causing a hole in the garbage truck's fuel tank. The garbage truck pulled over after being struck by the car and Great Falls Fire and Rescue was dispatched. When they arrived they started putting absorbent material down near the inlet to prevent any more fuel from entering the storm drain. There was some fuel that did enter the storm drain inlet, but a quantity was estimated to be small to minimal. Absorbent material had been put down to soak up remaining amount of fuel in the curb line. When Justin got to the scene a Republic employee was cleaning or sweeping up the used absorbent material. Justin verified that some of the fuel did in fact reach the storm drain. Justin did contact the Fire Dept. to make sure the entire quantity of the spilled fuel didn't enter the storm drain. The Fire Dept., did verify that the entire quantity did not enter the storm drain. Since the Republic employee was cleaning up the material Justin would follow up to make sure everything was cleaned up. Later that afternoon, Justin went to the location to verify the cleanup. Everything had been cleaned up. As of 6-27-2022, this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2209 IDDE	6/27/2022	7/31/2022		Petroleum	Enforcement L1

Response Notes

6-27-2022- Around noon, COGF Environmental was made aware of a sheen coming from outfall #22. Outfall #22 is considered a high priority outfall already by COGF. Both CMR refinery) and Veolia were on site by the time COGF staff arrived on site. The CMR team deployed booms and absorbent material in mouth of outfall to prevent any more of what looked like petroleum product from reaching the waterway. CMR staff did take samples of the product coming from outfall #22. CMR staff would monitor and maintain any booms, absorbent pads, and any other BMP's.
6-28-2022- The next morning Rodney Lance who is with Veolia and is the WWTP manager went to outfall #22 and observed a dark substance as well as absorbent pads that were completely black.
6-29-2022- COGF crews took the camera truck to the WWTP to video lines to hopefully identify where the dark product exiting the outfall is coming from. After videoing the lines, it was observed that the product was entering the storm drain system by entering into the pipe on the east end of the system near the CMR/WWTP property line. After this was identified, we informed CMR the product was likely coming into the pipe from the refinery somehow. The 5 day NCR form was compiled as well.
7-1-2022- The NRC form was submitted 7-1-2022 at 10:04 a.m.
7-7-2022- The portion of the storm pipe experiencing the unwanted material entering the pipe was plugged. All portions of the pipe in the area were also cleaned to see if there was any material still entering the pipe after the plugging the pipe. CMR will keep plug in place until source is identified, if amounts of the unwanted material continue to build up, CMR will be responsible for pumping and disposal as it is originating from the refinery. Camera trucks will be used to see efficiency of the plug in the future.
7-15-2022- The camera truck went and videoed the lines that were plugged. Nothing appeared to be entering the storm drain pipe. Since nothing new had entered the storm drain pipe this IDDE will be considered turned over to CMR as the product that was leaking out of the outfall was originating from CMR. COGF has turned this over to CMR to monitor until remedy to this issue can be found. As of the end of July 2022, COGF sees this as closed.

Photo 1

Sheen can be seen on water. This sheen is coming from a petroleum based product coming out of outfall #22.

Photo 2

Photo show a sheen on the water. Origination was from the refinery, this was determined after extensive investigative work.

Photo 3

Booms were placed out to catch as much of the material reaching water as possible. Material appeared to be some sort of petroleum based product.

Photo 4

Photo shows outfall #22, this is where the petroleum based product was reaching the water.

Investigator: Doll

Location: Outfall #22

Weather: Sunny and 80

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 6-27-2022

Incident ID: 2209 IDDE

6-27-2022- Around noon, COGF Environmental was made aware of a sheen coming from outfall #22. Outfall #22 is considered a high priority outfall already by COGF. Both CMR refinery) and Veolia were on site by the time COGF staff arrived on site. The CMR team deployed booms and absorbent material in mouth of outfall to prevent any more of what looked like petroleum product from reaching the waterway. CMR staff did take samples of the product coming from outfall #22. CMR staff would monitor and maintain any booms, absorbent pads, and any other BMP's.

6-28-2022- The next morning Rodney Lance who is with Veolia and is the WWTP manager went to outfall #22 and observed a dark substance as well as absorbent pads that were completely black.

6-29-2022- COGF crews took the camera truck to the WWTP to video lines to hopefully identify where the dark product exiting the outfall is coming from. After videoing the lines, it was observed that the product was entering the storm drain system by entering into the pipe on the east end of the system near the CMR/WWTP property line. After this was identified, we informed CMR the product was likely coming into the pipe from the refinery somehow. The 5 day NCR form was compiled as well.

7-1-2022- The NRC form was submitted 7-1-2022 at 10:04 a.m.

7-7-2022- The portion of the storm pipe experiencing the unwanted material entering the pipe was plugged. All portions of the pipe in the area were also cleaned to see if there was any material still entering the pipe after the plugging the pipe. CMR will keep plug in place until source is identified, if amounts of the unwanted material continue to build up, CMR will be responsible for pumping and disposal as it is originating from the refinery. Camera trucks will be used to see efficiency of the plug in the future.

7-15-2022- The camera truck went and videoed the lines that were plugged. Nothing appeared to be entering the storm drain pipe. Since nothing new had entered the storm drain pipe this IDDE will be considered turned over to CMR as the product that was leaking out of the outfall was originating from CMR. COGF has turned this over to CMR to monitor until remedy to this issue can be found. As of the end of July 2022, COGF sees this as closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2210 IDDE	8/15/2022	9/27/2022	NO	Petroleum	

Response Notes

7-1-2022- About 3p.m., COGF ENV got a call from an anonymous individual that there was some sort of petroleum product in a flow line. Nate and Justin arrived at 1517 4th Avenue Northwest. Upon arrival, some unknown product was located in the flow line. Some sort of absorbent material was also observed to already have been applied to the area. None of this was close to entering a storm drain. Nearest inlet was roughly one half of a block away. The unknown product was in front of a driveway entrance. We continued to monitor the incident so that no more of the product was allowed into the flow line or allowed to enter storm drain. As of 9-27-2022 COGF considered this IDDE closed.

Photo 1

Photo shows area with petroleum product in flow line of driveway.

Photo 2

Photo shows the small area affected by the petroleum product in the flow line. Near top of photo some absorbent material can be seen.

Investigator: Besich/Doll

Location: 1517 4th Ave NW

Weather: 84 and Sunny

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 7-1-2022

Incident ID: 2210 IDDE

7-1-2022- About 3p.m., COGF ENV got a call from an anonymous individual that there was some sort of petroleum product in a flow line. Nate and Justin arrived at 1517 4th Avenue Northwest. Upon arrival, some unknown product was located in the flow line. Some sort of absorbent material was also observed to already have been applied to the area. None of this was close to entering a storm drain. Nearest inlet was roughly one half of a block away. The unknown product was in front of a driveway entrance. We continued to monitor the incident so that no more of the product was allowed into the flow line or allowed to enter storm drain. As of 9-27-2022 COGF considered this IDDE closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2211 IDDE	8/15/2022	8/14/2022	NO	Other	

Response Notes

8-14-2022- On August 14, 2022, COGF was informed of sewage coming out of a manhole in the Scheels parking lot. COGF was told a local plumber was called to clean the line, but no one could be reached. COGF was then notified. City crews cleaned the line, removed the blockage, and put lime down. The line was a private line. COGF ENV was told very little even reached the closest storm drain inlet. The IDDE was resolved and as of 8-14-2022 it was considered closed.

Environmental Illicit Discharge Report

Date: 8-14-2022

Incident ID: 2211 IDDE

8-14-2022- On August 14, 2022, COGF was informed of sewage coming out of a manhole in the Scheels parking lot. COGF was told a local plumber was called to clean the line, but no one could be reached. COGF was then notified. City crews cleaned the line, removed the blockage, and put lime down. The line was a private line. COGF ENV was told very little even reached the closest storm drain inlet. The IDDE was resolved and as of 8-14-2022 it was considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2212 IDDE	8/18/2022	8/30/2022	NO	Petroleum	Enforcement L1

Response Notes

8-17-2022- A caller informed COGF ENV., that a contractor had a project going on near 2733 Greenbriar Drive and that some sort of oily product was all over the road and vehicles were driving through it, making an even bigger mess. Justin checked to see if a RECP had been issued in this area, which showed that there was a RECP issued for a project at 22733 Greenbriar Drive. Justin contacted the applicant to inform him of the oily mess on the roadway and informed the applicant that since the oily substance came from their construction site that they needed to clean it up. Justin informed the contractor that COGF would be following up on this to make sure that absorbent material was put down as well as cleaned up.
8-18-2022- Justin went by the site in the mid-afternoon timeframe and absorbent material had been applied to area where the petroleum product was on the roadway.
8-30-2022- Justin drove by the site to make sure the issue hadn’t been allowed to continue or had gotten worse. Absorbent material was no longer on road and had been cleaned up. The road looked good at this point. As of 8-30-2022 this IDDE is considered closed.

Photo 1

Photo shows oil that was spilled on road. Some passing were tracking the mess up and down the street.

Photo 2

Some faint tracking seen heading away from the area the oil was spilled.

Photo 3

Tacking is shown coming from the area where the oil was spilled on the street.

Photo 4

Contractor had applied absorbent material to the oil that was spilled on the road.

Investigator: Doll

Location: 2733 Greenbriar Dr.

Weather: Sunny & 88

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 8-17-2022

Incident ID: 2212 IDDE

8-17-2022- A caller informed COGF ENV., that a contractor had a project going on near 2733 Greenbriar Drive and that some sort of oily product was all over the road and vehicles were driving through it, making an even bigger mess. Justin checked to see if a RECP had been issued in this area, which showed that there was a RECP issued for a project at 22733 Greenbriar Drive. Justin contacted the applicant to inform him of the oily mess on the roadway and informed the applicant that since the oily substance came from their construction site that they needed to clean it up. Justin informed the contractor that COGF would be following up on this to make sure that absorbent material was put down as well as cleaned up.

8-18-2022- Justin went by the site in the mid-afternoon timeframe and absorbent material had been applied to area where the petroleum product was on the roadway.

8-30-2022- Justin drove by the site to make sure the issue hadn't been allowed to continue or had gotten worse. Absorbent material was no longer on road and had been cleaned up. The road looked good at this point. As of 8-30-2022 this IDDE is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2213 IDDE	8/24/2022	8/24/2022	NO	Petroleum	Enforcement L1

Response Notes

Joe from CMR called COGF ENV to inform us that a petroleum based liquid reached a storm drain. Absorbent socks had been deployed around inlet by the time COGF staff arrived at the inlet. A small sheen was seen at Outfall 16 as this outfall is connected to the line that the inlet the petroleum product entered the system. Outfall 16 is already classified as a high priority outfall. Absorbent pads and booms were deployed at the outfall as well. The release came from one of CMR’s adjacent yards and was a single incident. This happened during an overnight rain event. CMR said they would follow through on their reporting and remove booms from outfall and inlet when necessary. This is considered closed.

Photo 1

Photo shows water pooled in the flow line from previous evening rain. A sheen could be seen on the standing water.

Photo 2

Photo shows flow line leading up to the stormdrain where liquid entered stormdrain. BMP's had been deployed to prevent any further unwanted liquid from entering stormdrain.

Photo 3

Closer look at BMP's installed to prevent unwanted liquid from entering the storm drain.

Photo 4

A sheen was observed at the mouth of the outfall in which the storm drain was connected to. BMP's were also installed at this outfall as well.

Investigator: Doll

Location: 459 17th Ae NE

Weather: 58 and Overcast

Camera: DMPV567CJ2D1

Photo 5

Photo shows the BMP's installed at the mouth of the outfall to prevent any of the unwanted liquid from leaving the structure.

Investigator: Doll

Location: 459 17th Ae NE

Weather: 58 and Overcast

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 8-24-2022

Incident ID: 2213 IDDE

8-24-2022- Joe from CMR called COGF ENV to inform us that a petroleum based liquid reached a storm drain. Absorbent socks had been deployed around inlet by the time COGF staff arrived at the inlet. A small sheen was seen at Outfall 16 as this outfall is connected to the line that the inlet the petroleum product entered the system. Outfall 16 is already classified as a high priority outfall. Absorbent pads and booms were deployed at the outfall as well. The release came from one of CMR's adjacent yards and was a single incident. This happened during an overnight rain event. CMR said they would follow through on their reporting and remove booms from outfall and inlet when necessary. This is considered closed.

Request ID	Entry Date	Close Date	Hazmat Response Required	Pollutant Type	Enforcement Level
2214 IDDE	8/31/2022	9/9/2022	NO	Other	

Response Notes

COGF ENV was informed at about 4p.m., that a transformer tub that was being replaced by Northwestern Energy had spilled between Central Ave. and 1st Ave. S on 4th Street S. Nate and Justin arrived in the area and by the time we arrived Northwestern Energy had put down absorbent material on the roadway and also put down absorbent material around nearby storm drain inlets. We were informed that a very small amount of the material had entered the storm drain. Northwestern Energy asked what our suggestions are for the incident, COGF suggested that they put absorbent socks in the affected storm inlets to soak up any material that had entered and soak up any material that may enter into the inlet. We asked that they clean the absorbent material off the roadway after all the material had been absorbed and that we would remove the socks in the storm inlets. This incident went on for a few more hours and Northwestern Energy cleaned up the roadway as we had asked. A few days later Justin went to the area and removed the absorbent sock from the storm inlets and verified the street had been properly cleaned. By 9-9-2022, this IDDE is considered to be closed.

Photo 1

Photo shows just how big of an area the electric tubs had spilled across when they were spilled. Absorbent material was placed on the liquid.

Photo 2

Northwestern Energy crews had put down a large amount of absorbent material to create a damn near storm inlet to prevent liquid from entering storm drain.

Photo 3

Photo shows the flow line on west side of the street. One can see that absorbent material had been applied the entire length of the street to absorb liquid.

Photo 4

Photo shows absorbent material used to damn liquid on east side of road from entering the storm drain.

Investigator: Besich/Doll

Location: 324 Central Ave

Weather: Sunny and 92

Camera: DMPV567CJ2D1

Photo 5

Photo shows the entire length of the street's flow line on the east side of the street with absorbent material applied to soak up liquid.

Photo 6

Photo shows the area where the spill originated from. The power pole tipped over and the transformer tubs spilled on roadway.

Photo 7

Another photo showing the large area affected by the transformer tub that were allowed to spill on the roadway.

Photo 8

Photo shows that a small amount of the liquid was able to reach storm drain prior to putting down any BMP's.

Investigator: Besich/Doll

Location: 324 Central Ave

Weather: Sunny and 92

Camera: DMPV567CJ2D1

Environmental Illicit Discharge Report

Date: 8-30-2022

Incident ID: 2214 IDDE

8-30-2022- COGF ENV was informed at about 4p.m., that a transformer tub that was being replaced by Northwestern Energy had spilled between Central Ave. and 1st Ave. S on 4th Street S. Nate and Justin arrived in the area and by the time we arrived Northwestern Energy had put down absorbent material on the roadway and also put down absorbent material around nearby storm drain inlets. We were informed that a very small amount of the material had entered the storm drain. Northwestern Energy asked what our suggestions are for the incident, COGF suggested that they put absorbent socks in the affected storm inlets to soak up any material that had entered and soak up any material that may enter into the inlet. We asked that they clean the absorbent material off the roadway after all the material had been absorbed and that we would remove the socks in the storm inlets. This incident went on for a few more hours and Northwestern Energy cleaned up the roadway as we had asked. A few days later Justin went to the area and removed the absorbent sock from the storm inlets and verified the street had been properly cleaned. By 9-9-2022, this IDDE is considered to be closed.

MCM-4 ATTACHMENTS

DATE RECEIVED

CITY OF GREAT FALLS

CONSTRUCTION SWPPP PLAN REVIEW CHECKLIST

NAME OF PROJECT:	PROJECT FILE NUMBER:	PROJECT ADDRESS:

TOTAL ACRES:	DISTURBED ACRES:	LATITUDE:	LONGITUDE:

APPLICANT:	ADDRESS:	PHONE NUMBER:

OWNER (if different):	ADDRESS:	PHONE NUMBER:

REVIEW HISTORY			
First Review			
Plan Received On:		Approved/Denied:	Denied
Review Completed:		Comments:	
Reviewed By:			
Second Review			
Plan Received On:		Approved/Denied:	
Review Completed:		Comments:	
Reviewed By:			
Third Review			
Plan Received On:		Approved/Denied:	
Review Completed:		Comments:	
Reviewed By:			

REPORT OF TECHNICAL REVIEW	
The Construction Stormwater Management Plan for the above named project or activity **includes** the necessary components identified within the attached checklist.	
The Construction Stormwater Management Plan for the above named project or activity **does not include** the necessary components identified within the attached checklist through failure to include the following:	

REVIEWED BY: DATE:

SIGNAURE:

Project Name: 0 Applicant: 0

	GENERAL INFORMATION	Complete	Incomplete	N/A	Comments:
1	Describe the project location (address, parcel number, etc.)				
	a. Description of project activity				
2	Areas (acres)				
	a. Total disturbed area				
	b. Existing impervious area				
3	Construction schedule/sequence				
4	Identify site features				
	a. Limits of improvements relative to neighbors or a Vicinity Map				
	b. Limits of clearing and grading				
	c. Existing vegetation delineated				
	d. Existing and proposed site topography				
	e. Existing and proposed runoff direction				
	f. Surface waters and storm conveyance systems w/in 200' of project				
	g. Description of outfall and receiving surface waters				
	h. Protection of waterways, receiving surface waters and natural resources				
	i. Construction Stormwater Management Plan is phased w/construction				
	j. Stockpile locations, staging areas and access points defined				
	k. Show all areas of construction, including but not limited to: structures, retaining walls, roads, utilities, trenches, catch basins, etc.				
	l. Description of site soil				
	m. Description of watershed tributary to site				
5	Maintenance Plan for Control Facilities				
6	Copies of Design Waivers or Variances				
7	Copy of NOI and SWPPP as submitted to DEQ, if applicable				
	EROSION AND SEDIMENT CONTROL				
1	Control Stormwater Volume and Velocity to minimize soil erosion, to include:				
	a. Select and design BMPs that address the amount, frequency, intensity, and total duration of precipitation; quantity and quality of stormwater runoff including peak flow rates and total storm water volume; soil characteristics for the construction project area(s) including the range of the soil particle sizes expected to be present on the site; and timeframes the construction project will be completed;				
	b. Implement and install BMPs in accordance with good engineering practices and design specifications;				
	c. Complete implementation and installation of BMPs before or at the start of each major construction activity;				
	d. Minimize erosion with the construction project area;				
	e. Divert stormwater runoff from distrubed areas to sediment removal BMPs;				
	f. Minimize sediment discharges from the construction project area; and				
	g. Maintain BMPs in effective operating condition.				

Project Name: 0 Applicant: 0

	EROSION AND SEDIMENT CONTROL (cont)	Complete	Incomplete	N/A	Comments:
2	Control Stormwater Discharges, to include:				
	a. Minimize erosion at outlets and conveyance channels; and therefore, protecting downstream properties and waterways by controlling volume and velocity w/in the construction project area;				
	b. Protect all storm drain inlets (to include offsite inlets which receive and carry stormwater flow from your site to a state surface water, provided you have the authority to access the storm drain inlet);				
	c. Manage and minimize vehicle/equipment entrances/exits to project area;				
	d. Stabilize ditches, swales, channels, and outlets;				
	e. Construct stormwater retention/detention facilities during initial site grading activities;				
	f. Provide surface outlets for retention/detention facilities for active construction, and discharge the highest quality water from the facility; and				
	g. Protect infiltration facilities from sedimentation during active construction.				
3	Minimize Soil Disturbances, to include:				
	a. Limit areas of disturbance and soil exposure; and				
	b. Provide a natural buffer w/in the construction project area.				
4	Minimize the Disturbance of Steep Slopes of 15% or greater, to include;				
	a. Design and construct cut/fill slopes to minimize erosion;				
	b. Divert off-site stormwater or groundwater away from slopes and disturbed areas; and				
	c. Prevent stormwater run on from impacting sediment removal BMPs.				
5	Maintain Natural Buffers around State Surface Waters, to include:				
	a. Maintain natural buffers around state waters; and				
	b. Direct stormwater runoff to vegetated areas.				
6	Minimize Soil Compaction and Preservation of Topsoil; to include:				
	a. Mark and maintain clearing limits before distrubing soils and during contruction activities; and				
	b. Preserve Topsoil.				
SOIL STABILIZATION					
1	Temporary Soil Stabilization, to include:				
	a. Stabilize disturbed areas immediately for any portion of the construction project that will remain inactive for 14 or more calender days with erosion control BMPs.				
2	Final Stabilization, to include:				
	a. Stabilize disturbed areas within any portion of the project that have completed clearing, grading, excavation, or other earth disturbing activities with erosion control BMPs.				

Project Name: 0 Applicant: 0

	DEWATERING	Complete	Incomplete	N/A	Comments:
1	Control groundwater, surface water, and/or accumulated stormwater dewatering activities to prevent discharges to state waters; and				
2	Obtain authorization under the Construction Dewaterin General Permit or an individual permit prior to discharge of dewatering effluent to state waters.				
	POLLUTION PREVENTION MEASURES				
1	Implement pollution prevention measures that effectively manage and dispose of all pollutants in a way that does not cause contamination of stormwater; to include:				
	a. Provide cover, containment, and protection for all chemicals, liquids, petrtoleum products, and construction materials, products, wastes;				
	b. Use spill prevention and control measures for vehicle maintenance and fueling;				
	c. Maintain appropriate spill kits; clean up spills and leaks immediately; and report appropriate quantities in accordance with Part 4 of the permit;				
	d. Prevent discharges of equipment wash water and clean-out wastes, and designate these activities away from state waters and their conveyances;				
	e. Apply fertilizeers and herbicides per manufacturers' requirements; and				
	f. Prevent discharges of concrete products.				
	SURFACE OUTLETS				
1	When discharging from basins and impoundments, outlet structures must be utilized that withdraw water from the surface, unless infeasible, to discharge the highest quality water from the facility.				
	PROHIBITED DISCHARGES				
1	The following dishcarges are prohibitied:				
	a. Wastewater from washout of concrete;				
	b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;				
	c. Fuels oils, or other potential pollutants used in vehicle and equipment operation and maintenance;				
	d. Soaps or solvent used in vehicle and equipment washing or external building wash down;				
	e. Stormwater discharges of disturbed, contaminated soils; and				
	f. Toxic or hazardous substances from a spill or other release including the disturbance and/or removal of contaminated soils.				

Date	Project Name
3/17/2022	Starbuck (10th Ave S)
8/2/2022	Independence Bank
8/30/2022	GF Clinic Expansion
8/30/2022	GF Clinic Surgery Center
10/6/2022	Arc Apts
11/22/2022	Tidal Wave Car Wash
12/27/2022	Copper View Apts

CITY OF GREAT FALLS
Public Works Department
CONSTRUCTION SITE VISIT
INSPECTION FORM

General Information	
Project Name:	
Location:	
Date of Inspection:	Start/End Time:
Inspector's Name(s):	
Inspector's Title(s):	
Inspector's Contact Information (phone):	
Describe Present Phase of Construction:	

Type of Inspection:

❑ Beginning of Construction ❑ Pre-storm event ❑ During rain event

❑ Post-rain event ❑ Conclusion of Project ❑ Response to violation or complaint

Weather Information

Has it rained since the last inspection? ❑Yes ❑No

If yes, provide:

Storm Start Date & Time: Storm Duration (hrs): Approximate Rainfall (in):

Weather at time of this inspection:

❑ Clear ❑ Cloudy ❑ Raining ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds

❑ Other: Temperature:

Do you suspect that discharges may have occurred since the last inspection?

❑Yes ❑No

Are there any stormwater discharges at the time of inspection? ❑Yes ❑No

If yes, provide location(s) and a description of stormwater discharged from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen:

Prohibited Discharges

Are there any prohibited discharges at the time of inspection? ❑Yes ❑No

If yes, provide location(s) and a description:

	BMP/Activity	Implemented?	Maintained?	Corrective Action Needed & Notes
Erosion and Sediment Controls				
1	Are stormwater volume and velocity controls being used to minimize soil erosion within the site? (e.g. check dams, fiber rolls, etc.)	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
2	Are stormwater volume and velocity controls being used to minimize soil erosion at discharge locations? (e.g. stilling basins, fiber rolls, etc.)	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
3	Are efforts being made to minimize the amount of soil exposed throughout the site?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
4	Are efforts being made to minimize the disturbance of steep slopes?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
5	Are perimeter controls and sediment barriers (e.g. silt fence) adequately installed (keyed into substrate) and maintained?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
6	Are storm drain inlets properly protected?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
7	Are discharge points and receiving waters free of sediment deposits? If no, provide locations.	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
8	Is there evidence of sediment being tracked into the street?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
9	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected by natural buffers, barriers, or similar BMPs?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
10	Are efforts being made to minimize soil compaction and preserve topsoil?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	

	BMP/Activity	Implemented?	Maintained?	Corrective Action Needed & Notes
Soil Stabilization				
11	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
Dewatering				
12	Are discharges from dewatering activities being managed by appropriate controls?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
Pollution Prevention Measures				
13	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
14	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
15	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
16	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
17	Are vehicle and equipment fueling, cleaning, material storage, and maintenance areas free of spills, leaks, or other harmful materials?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
Surface Outlets and Miscellaneous				
18	When discharging from basins and impoundments, are outlet structures that withdraw water from the surface being used?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
19	Are there locations where additional BMPs appear to be necessary?	❑Yes ❑No ❑ N/A	❑Yes ❑No ❑ N/A	
Describe any incidents of non-compliance not described above:				

Inspector's Signature

Date

MCM-5 ATTACHMENTS

CITY OF GREAT FALLS
Public Works Department
POST-CONSTRUCTION SITE VISIT
STORMWATER MANAGEMENT
CONTROL INSPECTION FORM

General Information	
Site Name (if Applicable):	Type of Control:
Location:	
Site Owner:	Phone Number:
Responsible Party:	Phone Number:
Date of Inspection:	Start/End Time:
Inspector's Name:	Inspector's Title:
Inspector's Contact Information (phone):	

Type of Inspection:

❑ Routine, Dry Weather ❑ Routine, Wet Weather ❑ Complaint Response

❑ Other _____

Weather Information

Weather at time of this inspection:

❑ Clear ❑ Cloudy ❑ Raining ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds

❑ Other: Temperature:

Do you suspect that any physical changes or damages to the stormwater management control may have occurred since the last inspection?

❑Yes ❑No

Are there any stormwater discharges at the time of inspection? ❑Yes ❑No

If yes, provide location(s) and a description of stormwater discharged from the site (presence of suspended sediment, turbid water, discoloration and/or oil sheen, odor, etc…)

Prohibited Discharges

Are there any prohibited discharges at the time of inspection and/or any signs of prohibited discharges since the last inspection? ❑Yes ❑No

If yes, provide location(s) and a description:

	Desired Conditions	Findings	Corrective Action Needed & Notes
1	Are the approved structural BMPs present?	❑Yes ❑No ❑N/A	
2	Are the structural BMPs sized in accordance with approval?	❑Yes ❑No ❑N/A	
3	There is no excessive sediment deposition.	❑Yes ❑No ❑N/A	
4	Slopes are well stabilized and are not contributing sediment to the stormwater management control.	❑Yes ❑No ❑N/A	
5	There is no scour in swales or other vegetated areas.	❑Yes ❑No ❑N/A	
6	Trash racks, inlets, outlets, and low flow orifices are clear of trash, debris, and sediment.	❑Yes ❑No ❑N/A	
7	There is no woody vegetation impeding the performance of any structural component of the stormwater management control.	❑Yes ❑No ❑N/A	
8	Outfall structures do not show signs of settling, cracking, bulging, misalignment or other structural deterioration.	❑Yes ❑No ❑N/A	
9	Embankments, emergency spillways, side slopes or inlet/outlet structures show no signs of erosion.	❑Yes ❑No ❑N/A	
10	Pipes going into and/or out of any stormwater management control are unclogged and unobstructed.	❑Yes ❑No ❑N/A	
11	There is no evidence of animal burrows.	❑Yes ❑No ❑N/A	
12	There is no trash or debris in the stormwater management control.	❑Yes ❑No ❑N/A	

13	There are no encroachments on the stormwater management control.	❑Yes ❑No ❑N/A	
14	All necessary repairs to safety devices such as fences, gates, covers or locks are complete.	❑Yes ❑No ❑N/A	
	Desired Conditions	**Findings**	**Corrective Action Needed & Notes**
15	There is not excessive algae or vegetation in the pond/ditch.	❑Yes ❑No ❑N/A	
16	The ground surface stabilization is retaining any highly erosive or unstable soils, seed germination is being properly facilitated, and any netting or blankets are properly fastened to obtain full contact with the ground.	❑Yes ❑No ❑N/A	
17	Stormwater control appears to be functioning properly.	❑Yes ❑No ❑N/A	
18	Are there locations where additional stormwater management controls appear to be necessary?	❑Yes ❑No ❑N/A	
19	(Other)	❑Yes ❑No ❑N/A	
Describe any incidents of non-compliance or need for maintenance not described above:			
Follow-up inspection required? ❑Yes ❑No			

Inspector's Signature

Date

Public Works Department
Environmental Division
1025 25th Ave NE
PO Box 5021
Great Falls, MT 59404
406-727-8390

For Office Use Only:
Date Received:
Permit #:

POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN CHECKLIST

(complete all applicable items)

Project Information
Site Address:
Project Name:
Description of Work:

General Submittal Components

Component	Complete	Comments
Stormwater Management Permit Application	☐ Yes ☐ N/A	
CSMP Permit Submittal Package	☐ Yes ☐ N/A	
Stormwater Management Plan Drainage Report *See Appendix B of City of Great Falls Storm Drainage Design Manual for Requirements*	☐ Yes ☐ N/A	
Geotechnical/Hydrogeology Report *See Appedix C of City of Great Falls Strom Drainage Design Manual for Requirements*	☐ Yes ☐ N/A	
Deign Waivers or Variances (if Applicable)	☐ Yes ☐ N/A	

Drainage Plan

Requirements	Addressed	Comments
Project Name (e.g., subdivision name)	☐ Yes ☐ N/A	
Developer and landowner name; if different	☐ Yes ☐ N/A	
Preparation date	☐ Yes ☐ N/A	
Name of preparer	☐ Yes ☐ N/A	
North arrow	☐ Yes ☐ N/A	
Graphic scale	☐ Yes ☐ N/A	
Legal Description	☐ Yes ☐ N/A	
Municipal boundaries	☐ Yes ☐ N/A	
Property boundaries (bearings, lengths, curve data)	☐ Yes ☐ N/A	
Easements/right-of-ways (location, width, purpose, ownership)	☐ Yes ☐ N/A	
Roads (names, ownership, etc.)	☐ Yes ☐ N/A	

Requirements	Addressed	Comments
Existing and proposed buildings/structures withing 150' of project area	☐ Yes ☐ N/A	
Fences, buffers, and berms	☐ Yes ☐ N/A	
Existing and proposed utilities (type & location)	☐ Yes ☐ N/A	
Irrigation canals including diversion point(s), etc.	☐ Yes ☐ N/A	
Existing vegetation (including woodlands)	☐ Yes ☐ N/A	
Wildlife habitat, including critical wildlife habitat	☐ Yes ☐ N/A	
Environmentally sensitive features (e.g. wetlands)	☐ Yes ☐ N/A	
Water resources (rivers, ponds, etc.) within 200' of project area	☐ Yes ☐ N/A	
FEMA Floodplains	☐ Yes ☐ N/A	
Existing and proposed site topography (2' maximum contour intervals)	☐ Yes ☐ N/A	
Pervious and impervious surface by type	☐ Yes ☐ N/A	
Existing and proposed permanent stormwater facilities (stormdrain, inlets, manholes, etc.)	☐ Yes ☐ N/A	
Invert elevations, slopes, and lengths of stormdrain facilities	☐ Yes ☐ N/A	
Location of permanent stormwater control(s)	☐ Yes ☐ N/A	
Plan and profile of each permanent stormwater control	☐ Yes ☐ N/A	
Discharge points clearly labeled	☐ Yes ☐ N/A	
Operation and Maintenance Manual for Each Permanent Stormwater Management Control		
The stormwater management control owner	☐ Yes ☐ N/A	
The party responsible for long-term O&M with contact information	☐ Yes ☐ N/A	
An inspection checklist to be used for routine inspections	☐ Yes ☐ N/A	
A schedule of inspection and maintenance for routine and non-routine inspections and maintenance tasks to be conducted	☐ Yes ☐ N/A	
A list of source controls	☐ Yes ☐ N/A	
System failure and replacement criteria to define the post-contruction stormwater management control's performance requirements	☐ Yes ☐ N/A	
A copy of the recorded O&M Agreement with the City	☐ Yes ☐ N/A	

Certified By: _____ Date: _____

Signature: _____

MCM-6 ATTACHMENTS

Nathan Besich

From: Meaghan Mulcahy <noreply@regfox.com>
Sent: Tuesday, April 5, 2022 1:08 PM
To: Justin Doll
Subject: SafetyFestMT: Helena 2021

SafetyFestMT: Helena 2021

Your Registration Details Are Below

Confirmation SFTYFSTMTMSSLVQG02JJ

Name	Justin Doll
Company	City of Great Falls
Email	jdoll@greatfallsmt.net
Phone Number	+1 4067278390
Address	1005 25th Ave. NE Great Falls, MT 59403 US
Is this Your First SafetyFest?	No
If not, how many SafetyFests Have You Attended?	1 - 5
Age	25 - 34
Business Size	250+
Industry	City Government

How Did You Hear About SafetyFestMT?	Employer
Have You Heard of the Montana Safety Culture Act (MSCA)?	Yes
Are You an Independent Contractor?	No
Tuesday 5/17: 8:00 am - 5:00 pm	HAZWOPER 8-hr Refresher (ROOM
Tuesday 5/17: 12pm-12:30pm	Lunch

View Receipt

Thank you for registering! If you would like to add/delete classes, you can create an account by clicking button below. This way you will not have to register more than once.

To access your virtual classes, please visit: https://safetyfestmt.dli.mt.gov/virtual-event

If you run into any issues or have any questions, please contact Meaghan Mulcahy at meaghan.mulcah

Nathan Besich

From: Justin Doll
Sent: Thursday, February 17, 2022 9:10 AM
To: Dee Strending
Subject: FW: Registration Confirmed - MT Storm Water 2022 Attendee Registration

Here is my conformation for the MT Stormwater Conference in May.

From: Traci Ulberg, CMP, CAE
Sent: Thursday, February 17, 2022 9:00 AM
To: Justin Doll
Subject: Registration Confirmed - MT Storm Water 2022 Attendee Registration

MT STORMWATER 2022
Resilience
BUILDING SUSTAINABLE COMMUNITIES

Dear Justin,

Your registration has been confirmed for the **2022 Storm Water Conference.** Please save this email for future reference.

Attending: Justin Doll
Confirmation Number: SLNGSKTWQHC
Conference APP/Platform: We are using Whova as our online conference app and platform. Please look for a Whova invite shortly.

Current Registration:

Registration Information:		
Registration Items		
Justin Doll	Full Conference: Montana Government/Non-Profit | In-Person	
Sessions		
Justin Doll	Registration	02-May-2022 7:30 AM
Justin Doll	Welcome/Opening	02-May-2022 8:30 AM
Justin Doll	Keynote	02-May-2022 9:00 AM
Justin Doll	Break	02-May-2022 10:00 AM

Justin Doll	A2: Urban Waters Partnership: Transformation Through Collaboration	02-May-2022 10:15 AM
Justin Doll	Break	02-May-2022 11:00 AM
Justin Doll	B2: NOAA Atlas 14 Volume 12: Precipitation-Frequency Estimates for Montana and Idaho	02-May-2022 11:15 AM
Justin Doll	Lunch: Keep an Eye Out for Aquatic Invasic Species	02-May-2022 12:00 PM
Justin Doll	C1: Storm Water Management at the Urban/Agricultural Interface	02-May-2022 1:00 PM
Justin Doll	Break	02-May-2022 1:45 PM
Justin Doll	D1: Slowing Storm Water and Accelerating Change by Focusing Nonpoint Source Resources	02-May-2022 1:55 PM
Justin Doll	Break	02-May-2022 2:40 PM
Justin Doll	E2: Watershed Restoration from the Continental Divide Down	02-May-2022 2:50 PM
Justin Doll	Break (Food Provided)	02-May-2022 3:35 PM
Justin Doll	General Session: Planning for Resilience: Storm Water Management Lessons from Montana Communities	02-May-2022 3:55 PM
Justin Doll	Vendor & Exhibitor Evening Reception	02-May-2022 5:15 PM
Justin Doll	Opening Session	03-May-2022 8:00 AM
Justin Doll	Keynote	03-May-2022 8:15 AM
Justin Doll	F4: Lessons Learned from Statewide LID Training Program in Washington State	03-May-2022 9:15 AM
Justin Doll	Break (Food Provided)	03-May-2022 10:00 AM
Justin Doll	G2: MPDES Storm Water Construction General Permit: What to Expect in 2023	03-May-2022 10:20 AM
Justin Doll	Break	03-May-2022 11:05 AM
Justin Doll	H3: Piloting a Mapping Approach to Plan Infrastructure Investments with Multiple Benefits	03-May-2022 11:15 AM

Justin Doll	Lunch: Awards: Excellence in Environmental Achievements	03-May-2022 12:00 PM
Justin Doll	I4: The Importance of Education and Communication for MS4 Compliance	03-May-2022 1:00 PM
Justin Doll	Break	03-May-2022 1:45 PM
Justin Doll	J2: Storm Water Infiltration in Missoula - History, Sustainability, and Aquifer Protection	03-May-2022 1:55 PM
Justin Doll	Break (Food Provided)	03-May-2022 2:40 PM
Justin Doll	Break	03-May-2022 3:45 PM
Justin Doll	M3: The Evolution of Storm Water Management in Downtown Missoula	03-May-2022 3:55 PM
Justin Doll	Mixer / Social	03-May-2022 5:00 PM
Justin Doll	N2: Solutions to Storm Water Funding Challenges	04-May-2022 9:00 AM
Justin Doll	Break	04-May-2022 9:45 AM
Justin Doll	O2: Flathead Rain Garden Initiative	04-May-2022 10:00 AM
Justin Doll	Break	04-May-2022 10:45 AM
Justin Doll	P2: Planning for the "New Normal": Pipeline Construction During Extreme Weather Events	04-May-2022 11:00 AM
Justin Doll	Lunch: Conference Adjournment and Evaluations	04-May-2022 11:45 AM

Additional Information

Justin Doll	Do you have any special dietary needs? No Pursuant to the Americans with Disabilities Act, do you require specific aids or services? No

Sincerely,

Traci Ulberg, CMP, CAE
Meetings Northwest, Inc.
tulberg@meetingsnorthwest.com

Switch to Invoice

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Water & Environmental TECHNOLOGIES

Water & Environmental Technologies
Montana, US
training@waterenvtech.com

ORDER CONFIRMATION

Date: September 27, 2022

Transaction ID: 813

Status: Complete

Event Name: SWPPP Preparer & Administrator Certification Course (First Time Admin Course)—September 28-29, 2022
(view)

Ticket	Description	Quantity	Price	Total
SWPPP Preparer & Administrator Certification	(For SWPPP Preparer & Administrator Certification Course (First Time Admin Course)—September 28-29, 2022) *This ticket can be used once at any of the dates/times below.*	1	$350.00	$350.00

Date/Time:

September 28, 2022 8:30 am - September 28, 2022 4:30 pm (America/Denver)

Venue

Water & Environmental Technologies—Butte, MT
(view)

Registration Details ( )

Attendee	Jack Wang (jwang@greatfallsmt.net)
Registration Code:	813-66-1-2c41 - Approved
Custom Questions and Answers:	
Title	Environmental Program Specialist
Company	City of Great Falls

	I have verified that the course, number of students, and date/location are correct., I agree to the terms and conditions and have reviewed the Training Information, Charges and Addition Expenses, and Cancellation Policy sections above.
How did you hear about WET's SWPP training courses?	WET Employee
We now offer web-based instructor-led training! How will you be taking this course?	Online
First Name	Jack
Last Name	Wang
Email Address	jwang@greatfallsmt.net
Phone Number	406-727-8390
Is there anything we need to know about your learning and/or physical abilities?	No
Learning and/or Physical Abilities Comments	
Dietary Restrictions	No
Dietary Comments	

Additional Charges/Discounts

Name	Description	Quantity	Unit Price	Total

Taxes

***** Taxable items. The total amount collected for taxes is reflected in the total(s) below.

Tax Name	Description	Rate	Tax Amount

Grand Total: $350.00 (USD)

Payments

Payment Method	Date	Transaction Id / Cheque #	P.O. / S.O.#	Status	Amount

USAePay	September 27, 2022 10:13 am	3236432974	Accepted	$350.00

Total Paid	$350.00 (USD)
Amount Owed:	**$0.00 (USD)**

Additional Information:

Venue Details:

Water & Environmental Technologies—Butte, MT

Map and Directions

510 East Park Street
Butte
Montana
59701
United States

Image not found or type unknown

Switch to Invoice

Download PDF

As part of the class, you'll need to download and read the Realtor Training Notes
available for download here (PDF ~ 2MB)

Course Instructions

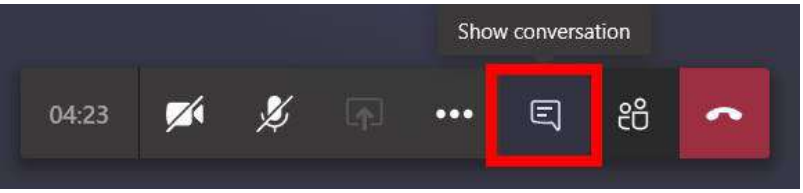
Log In Herep>

Web-Based Course Instructions

If you're attending this course as a web-based course, please use the link below to log in the day of instruction. You will participate via Survey 1, 2, 3 questions and the live chat window.

Log In Here

Once you're logged in, make sure you click on "Show Conversation" so that you can interact with the instructor.



CERTIFICATE

PROUDLY PRESENTED TO

Nate Besich

Managing Stormwater through Green Infrastructure & Low Impact Development Presented by Sam Justice - 1.0 PDH

Jan 18, 2022	*Mike Dickey*
Date of Completion	Organizer

PRESTO | GEOSYSTEMS®

STRENGTH. FROM THE GROUND UP.

Since 1979

Nathan Besich

From: Traci Ulberg, CMP, CAE <tulberg@meetingsnorthwest.com>
Sent: Thursday, February 17, 2022 8:43 AM
To: Nathan Besich
Subject: Registration Confirmed - MT Storm Water 2022 Attendee Registration

MT STORMWATER 2022
Resilience
BUILDING SUSTAINABLE COMMUNITIES

Dear Nate,

Your registration has been confirmed for the **2022 Storm Water Conference.** Please save this email for future reference.

Attending: Nate Besich
Confirmation Number: 5HN2WNBKYHY
Conference APP/Platform: We are using Whova as our online conference app and platform. Please look for a Whova invite shortly.

Current Registration:

Registration Information:		
Registration Items		
Nate Besich	Full Conference: Montana Government/Non-Profit | In-Person	
Sessions		
Nate Besich	Registration	02-May-2022 7:30 AM
Nate Besich	Welcome/Opening	02-May-2022 8:30 AM
Nate Besich	Keynote	02-May-2022 9:00 AM
Nate Besich	Break	02-May-2022 10:00 AM
Nate Besich	Break	02-May-2022 11:00 AM
Nate Besich	Lunch: Keep an Eye Out for Aquatic Invasic Species	02-May-2022 12:00 PM

CERTIFICATE

of acknowledgment and thanks

Nate Besich

Has successfully earned 0.8 Waste Water CEUs from the
Western States Alliance 2022 FOG Forum
May 25 & 26 - June 1 & 2 , 2022
OESACID 4661

POLLUTION PREVENTION resource center pprc

EXPANDING HORIZONS PNPW

WSA a project of pprc.org

ED GONZALEZ
Executive Director of Pollution Prevention Resource Center

CLAYTON BROWN
Western States Alliance Program Manager

Location	Facilities/Activities
Public Works Complex	Maintenance / storage yards
	Waste handling / disposal areas
	Vehicle fleet / maintenance shop
	Salt / snow storage
	Building Maintenance
	Parking lot maintenance
	Road Maintenance
	Storm system maintenance
Park & Recreation Complex	Maintenance / storage yards
	Waste handling / disposal areas
	Vehicle fleet / maintenance shop
	Park & open space maintenance

*refer to SPCC Plans for both complexes for inspection procedures

2019

Spill Prevention, Control and Countermeasure (SPCC) Plan

City of Great Falls

Public Works Department

1005 25th Ave. NE, Great Falls, MT 59404

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN

City of Great Falls
Public Works Department
1005 25th Ave. NE
Great Falls, Cascade County, MT 59404

July 2019

Prepared By:
NCI Engineering Co.
Great Falls, MT 59405
Phone: (406)453-5478
www.nciengineering.com

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EXECUTIVE SUMMARY

Introduction - Conformance with SPCC Requirements 40 CFR 112.7(a)(1)

City of Great Falls Public Works Complex, Great Falls, MT in accordance with the guidelines established by the Environmental Protection Agency regulations on Discharge of Oil (40 CFR Part 110) and Oil Pollution Prevention (40 CFR 112), has prepared this Spill Prevention, Control and Countermeasure (SPCC) Plan for the Public Works Complex which includes two (2) addresses with Administration Building at 1005 25th Ave. NE, Great Falls, Cascade County, Montana; and Engineering/Operations Building address of 1025 25th Ave. NE, Great Falls, Cascade County, Montana 59404. Through this SPCC plan, this facility conforms to the specific guidelines established in 40 CFR 112.7. A copy of these regulations is included with this plan. The facility currently has one (1) above-ground double wall fuel storage tank, and numerous oil products located in the shop buildings at the time of this writing.

This plan outlines procedures to prevent the discharge of oil into the environment, especially surface water. Such discharge is prohibited by law if it affects water quality, causes a film, sheen or discoloration of the water surface or upon water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. Further, this plan creates mechanisms for response to discharges.

Facility Description

This SPCC plan was developed for the City of Great Falls Public Works Complex facility located at 1005 25th Ave. NE and 1025 25th Ave. NE, Great Falls, Montana. City of Great Falls Public Works Complex is a municipal public works complex with office buildings, shops, equipment storage buildings, City vehicles, equipment and stored road materials.

Applicability

Federal regulations require owners or operators of non-transportation-related bulk petroleum storage facilities, having an aggregate aboveground storage capacity greater than 1,320 gallons or buried storage capacity greater than 42,000 gallons to prepare and maintain site specific SPCC Plan for their facility.

SPCC regulations outlined under 40 CFR Part 112 apply to non-transportation related facilities with certain physical characteristics and oil-storage volumes. A non-transportation related facility is subject to SPCC regulations if:

- the total aboveground storage capacity exceeds 1,320 gallons, and
- due to its location, the facility could reasonably be expected to discharge oil, either directly or indirectly into or upon the navigable waters of the United States. The term navigable waters includes all waters currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce . . . as well as waters which are or could be used by interstate or foreign travelers for recreation or other purposes; or from which fish are or could be taken and sold in interstate or foreign commerce. If the release of product could reach a sewer line, drainage ditch,

intermittent stream bed (or the like) that discharges into navigable waters, either directly or indirectly, then the facility is subject to 40 CFR Part 112.

The City of Great Falls Public Works Complex facility is considered a non-transportation related facility. Its aboveground storage capacity exceeds 1,320 gallons. In the event of a major fuel release, discharges from the facility have a potential for reaching drainages which eventually flow to the Missouri River. Therefore, the subject City of Great Falls Public Works Complex is subject to the SPCC regulations of 40 CFR Part 112.

Spill History

The subject facility has not experienced any oil spill events exceeding 1,000 gallons and no two discharges within any twelve month period in the three years prior to the effective date of the SPCC plan.

Spill Prediction

If experience indicates a reasonable potential for equipment failure, include a prediction of the direction, rate of flow, and total quantity of product which could be discharged from the facility resulting from a major failure. Examples of such failure include tank failure due to overflow, rupture or leakage; pipeline failure due to rupture or corrosion; leaking flanges, gaskets, expansion joints, valves, or catch pans; spills from bulk oil loading or unloading operations; and leaks due to other causes, such as failure of wastewater or stormwater treatment or disposal systems. Use of topographic maps is recommended.

Figures prepared for this facility depict the site and drainage characteristics for the facility. The figure shows the location of all storage. Arrows show the anticipated surface drainage directions. Facility storage information is included with the site maps indicating product, container, volume and location.

Plan Review

This SPCC plan must be reviewed at least every five (5) years and amended whenever there is a change in facility design, construction, operation or maintenance which materially affects (increases or decreases) the facilities potential to discharge into or upon navigable waters.

The City of Great Falls Public Works Department - Environmental Division will review the SPCC plan at a minimum of every five (5) years and amended if any changes in the facility (amend within 6 months) and the operation of the facility affect the potential for a release.

Contingency Plans

Appropriate containment and/or diversionary structures to prevent discharged product from reaching a navigable stream should be provided (e.g. dikes, berms, retaining walls, curbing, culverts, gutters, drainage systems, retention basins, sorbent materials). If such measures listed above are deemed impractical, the following should be provided: a strong *oil spill contingency plan* following the provision of 40 CFR, Part 109 and a written commitment of manpower equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.

The facility utilizes secondary containment, a double-walled steel tank for their fuel station and a double-walled tank for waste oil to prevent discharged product from reaching navigable waters. Other oil and liquid products are stored within buildings with accessible spill kits and floor dry.

Other non-oil products are listed in this plan; these products are included to allow for a comprehensive list of products on-site for personnel training and preparedness. Three (3) 3500 gallon Magnesium Chloride tanks are located on-site and are not subject to the SPCC rules and do not provide active secondary containment. These tanks, in the event of a spill, flow to on-site storm drainage pond as a secondary containment measure. The tanks are full one month during the summer and are empty the rest of the year.

The precautionary measures taken at this facility are deemed appropriate for this location. An *oil spill contingency plan* is therefore not viewed as a necessity for this site.

SECTION 1 - PLAN CERTIFICATION

A. FACILITY APPROVAL 40 CFR 112.7

The City of Great Falls Public Works Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains high standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan for its Public Works Complex at the following addresses:

- 1005 25th Ave NE, Great Falls, Montana 59404
- 1025 25th Ave NE, Great Falls, Montana 59404

This SPCC Plan addresses the accidental discharge of oil, which could adversely impact the environment. It describes control measures to be taken to prevent spills and the countermeasures to be taken in the event of a spill or release.

Facility Name:	City of Great Falls Public Works Complex
Facility Address:	1005 25th Ave NE, Great Falls, Cascade County, MT 59404 1025 25th Ave NE, Great Falls, Cascade County, MT 59404
Facility Type:	Municipal Public Works Complex

As the Owner's Representative of City of Great Falls Public Works Department, I am responsible for the operation of this facility, I certify that the following SPCC Plan has my approval, that the resources necessary to carry out this plan have been and will continue to be made available, and that I have the authority to make this certification.

Authorized Facility Representative:

Signature: _____

Title: _____

Date: _____

B. ENGINEER CERTIFICATION 40 CFR 112.3 (d)

All state requirements and requirements for onshore facilities are met by this Plan. By means of this certification I attest that I am familiar with the requirements of 40 CFR Part 112.3; that myself or my agent has visited and examined the facility; that this Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR part 112.3; that procedures for required inspections and testing have been established; that this Plan is adequate for the facility.

This certification is based only on the information available to the engineer from the owner of the facility.

This certification shall in no way relieve the owner or operator of the facility of his duty to prepare and fully implement this plan in accordance with the requirements of 40 CFR 112.3.

The engineer provided minimum calculations required to meet 40 CFR 112.3 and does not necessarily provide spacing to meet all applicable fire code and OSHA requirements.

Date: _____

Project Engineer Signature: _____

Project Manager Signature: _____

Registration Number: _____

SECTION 2 - FACILITY INFORMATION
40 CFR 112.7 (a)(3)

Facility Owner, Address and Telephone:

City of Great Falls Public Works Complex
1005 25th Ave. NE
1025 25th Ave. NE
Great Falls, Cascade County, MT 59404
406-727-8390

Facility Contact(s):

Facility Owner/Operator(s) Information:

Name: City of Great Falls Public Works Department

Address: 1005 25th Ave. NE
1025 25th Ave. NE

City, State, Zip Code: Great Falls, MT 59404

Telephone Number: 406-727-8390

Manager Contact Information:

Name: Jim Rearden, P.E.
City of Great Falls Public Works Director

Telephone number: 406-727-8390

Facility Description

City of Great Falls Public Works Complex is a public works complex, including two addresses 1005 25th Avenue Northeast, Great Falls, Montana and 1025 25th Ave Northeast, Great Falls, Montana. The Public Works Department is one of nine departments within the City of Great Falls. The Public Works Department is located on the Public Works Complex site. The Public Works Department goal (per the City website) is to sustain a high quality of life in Great Falls through administration and management of:

- solid waste disposal and management
- water resources use and management
- sewer collection and management
- project administration and financing
- management of the roadways systems and traffic control systems
- project design, construction and management
- vehicle/equipment purchasing and equipment revolving schedule management.

The facility is located in Township 21N Range 3E and Section 36 in the North Riverview Terrace Section, Great Falls, Montana, Cascade County. The coordinates are approximately: latitude 47.529294, longitude 111.288624.

The facility consists of two (2) occupied office buildings. The lower building houses the Public Works Department, Environmental Division, and Utilities Division offices; and the Utilities Division shop and meter maintenance shop. The upper (east building) contains Engineering, Street, Solid Waste along with centralized shop services (fleet maintenance). The remaining complex outlying buildings are shops, equipment and truck storage sheds. Utilities utilize approximately two on the west property line, and solid waste/streets has approximately 3 on the east and northeast part of the site. The facility had a scale house on the north portion of the property.

The oil storage locations include the following (1) Fuel Station (1- 20,000 gallon tank), (2) Utility Shop, (3) Sewer Jet Shop, (4) Cold Storage Building, (5) Maintenance Shop Storage and (6) Street Shop. The Fuel Station includes one (1) double-walled tank. Other listed oil products are located in buildings that have spill kits and containment materials. Other products are listed in this plan, that are not oil related but these products are included to allow for a comprehensive list of products on-site for personnel training and preparedness. Bulk fuel is typically purchased from a licensed fuel contractor and hauled to the on-site tanks. The following table provides the product information.

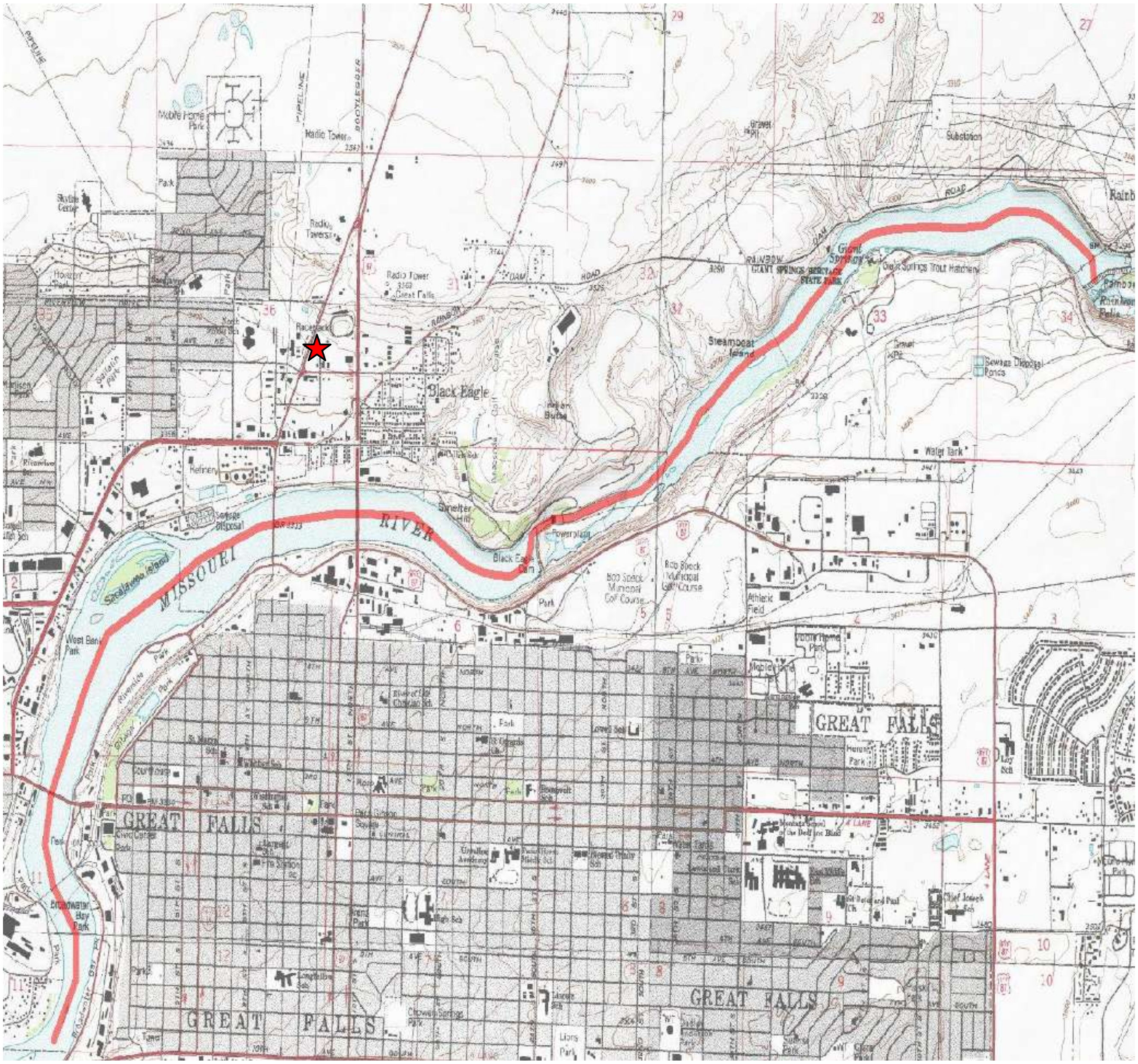
Location	**Container Type**	**Volume (gallons)**	**Oil and/or Product Type**
Fuel Station - Public Works Complex	Aboveground Double Wall Tank	1- 20,000 gallons	Diesel & Gasoline
Utility Shop	55 Gallon Drum	1-55 gallon drum	SAE 15W-40
	55 Gallon Drum	1-55 gallon drum	Stoddard Solvent
Sewer Jet Shop	55 Gallon Drum	1-55 gallon drum	DEF (Diesel Additive)
Cold Storage Building	55 Gallon Drums	2-55 gallon drum	Kerosene
Maintenance Shop	Double Wall Tank	1-750 gallons	Waste Oil
	Plastic Tote	1-330 gallons	Def ISO 22241
	Drum	1-55 gallon	ATF
	Drum	1-55 gallon	Megaplex XDS Grease
	Tote	1-270 gallons	Hydraulic Oil AW32
	Drum	1-55 gallons	All Season Antifreeze
	Drum	1-55 gallons	Zerex HD Antifreeze
	Tote	1-270 gallons	SAE 15W-40 oil
	Tote	1-80 gallons	Wiper Fluid
	Tote	1-80 gallons	OW20 Oil
	Tote	1-80 gallons	5W30 Oil
	Drum	1-55 gallons	CAT Drive Train Oil
	Drum	1-55 gallons	Universal Tractor Oil

Location	Container Type	Volume (gallons)	Oil and/or Product Type
Street Shop	Plastic Container	1-290 gallons	Unitex Q-2 Release Agent
	Plastic Container	1-290 gallon	Citra Clean Concentrate
	Plastic Container	1-80 gallon	Hydraulic Oil
	Plastic Container	1-80 gallon	Anti-freeze
	Plastic Container	1-80 gallon	15-40 Motor Oil
	Plastic Container	1-80 gallon	Transmission Fluid
	Plastic Drum	55 gallon	Windshield Washer Fluid
	Portable Tank	2-100 gallon	Diesel Tanks
	Plastic Container	1- 110 gallon 1- 30 gallon	Unitex and Citra Clean Portable Tank
	Tote	55 gallon	Bulk Paint
Public Works Complex Yard	Plastic tanks	3 - 3500 gallon tanks	Magnesium Chloride
TOTAL VOLUME =		**34,340 gallons**	

SECTION 3 - FACILITY LAYOUT, STORAGE CAPACITY, DRAINAGE PATHWAY

A. FACILITY LAYOUT 40 CRF 112.7 (a)(3):

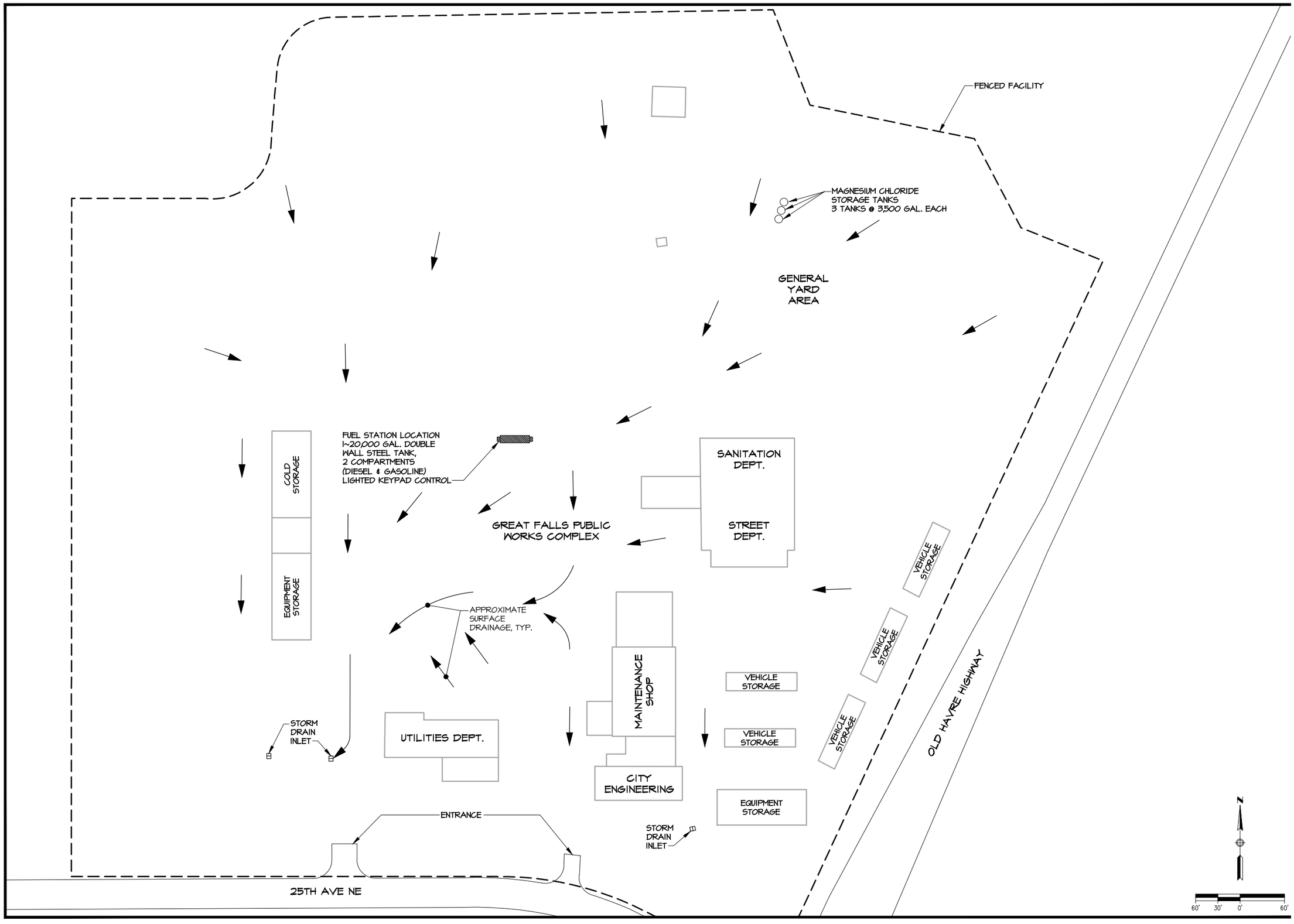
Figures



(Subject Facility denoted by red star)

FIGURE 1: VICINITY MAP

Source: USGS Quadrangle Maps
7.5 Minute Series (Topographic)
"Great Falls, Montana"



Revisions	By	Date

File No.	Job No.
FILE NO.	19A 19A-Fig2
Date	Scale
5/15/19	AS SHOWN

Professional Seal

Engineers
Environmental Specialists
Planners
Designers
Surveyors

NCI Engineering

4509 North Star Boulevard
Great Falls, MT 59405
Phone 406-453-5478

Owner

CITY OF GREAT FALLS MONTANA

O.F. #

Project Title

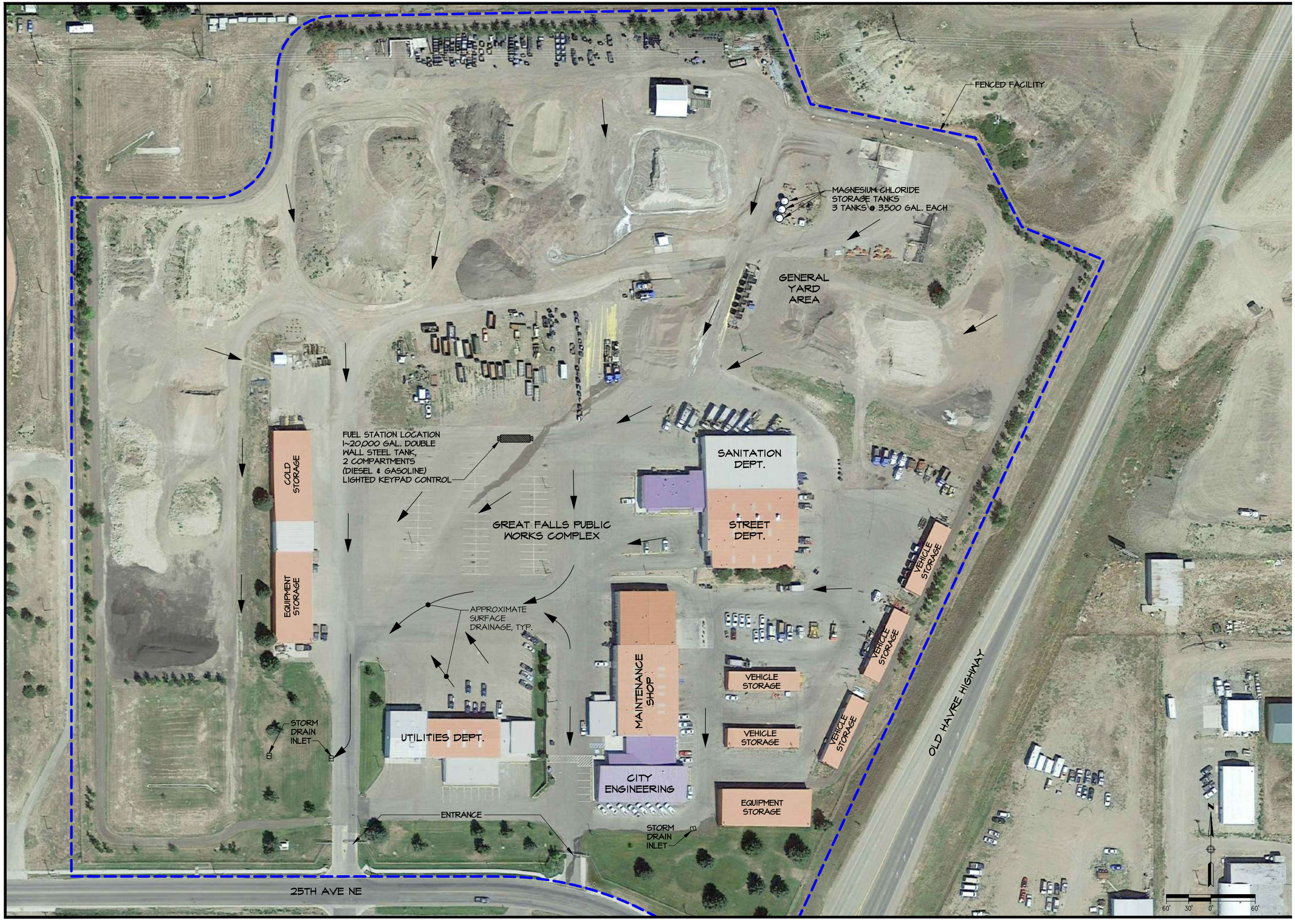
CITY OF
GREAT FALLS
PUBLIC WORKS
COMPLEX
SPCC

Sheet Title

SITE
PLAN

FIGURE 2

File # FILE #



Revisions	By	Date

File No.	Job No.
FILE NO.	19A 19A-Fig3
Date	**Scale**
5/15/19	AS SHOWN

Professional Seal

Engineers
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4509 North Star Boulevard
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CITY OF GREAT FALLS MONTANA

O.F. #

Project Title

CITY OF
GREAT FALLS
PUBLIC WORKS
COMPLEX
SPCC

Sheet Title

AERIAL

FIGURE 3

File # FILE #

SECTION 3 - FACILITY LAYOUT, STORAGE CAPACITY, DRAINAGE PATHWAY (cont.)

B. FACILITY STORAGE CAPACITY 40 CFR 112.7 (a)(3)(i)

Location	Container Type	Volume (gallons)	Oil and/or Product Type
Fuel Station - Public Works Complex	Aboveground Double Wall Tank	1- 20,000 gallons	Diesel & Gasoline
Utility Shop	55 Gallon Drum	1-55 gallon drum	SAE 15W-40
	55 Gallon Drum	1-55 gallon drum	Stoddard Solvent
Sewer Jet Shop	55 Gallon Drum	1-55 gallon drum	DEF (Diesel Additive)
Cold Storage Building	55 Gallon Drums	2-55 gallon drum	Kerosene
Maintenance Shop	Double Wall Tank	1-750 gallons	Waste Oil
	Plastic Tote	1-330 gallons	Def ISO 22241
	Drum	1-55 gallon	ATF
	Drum	1-55 gallon	Megaplex XDS Grease
	Tote	1-270 gallons	Hydraulic Oil AW32
	Drum	1-55 gallons	All Season Antifreeze
	Drum	1-55 gallons	Zerex HD Antifreeze
	Tote	1-270 gallons	SAE 15W-40 oil
	Tote	1-80 gallons	Wiper Fluid
	Tote	1-80 gallons	OW20 Oil
	Tote	1-80 gallons	5W30 Oil
	Drum	1-55 gallons	CAT Drive Train Oil
	Drum	1-55 gallons	Universal Tractor Oil
Street Shop	Plastic Container	1-290 gallons	Unitex Q-2 Release Agent
	Plastic Container	1-290 gallon	Citra Clean Concentrate
	Plastic Container	1-80 gallon	Hydraulic Oil
	Plastic Container	1-80 gallon	Anti-freeze
	Plastic Container	1-80 gallon	15-40 Motor Oil
	Plastic Container	1-80 gallon	Transmission Fluid
	Plastic Drum	55 gallon	Windshield Washer Fluid
	Portable Tank	2-100 gallon	Diesel Tanks
	Plastic Container	1- 110 gallon 1- 30 gallon	Unitex and Citra Clean Portable Tank
	Tote	55 gallon	Bulk Paint
Public Works Complex Yard	Plastic tanks	3 -3500 gallon tanks	Magnesium Chloride
TOTAL VOLUME =		**34,340 gallons**	

* The City Complex has 2 – 100 gallon mobile/portable oil storage tanks exist in the Street Department (40 CFR 112.7 (e)(2)(x)

Total: 34,340 gallons

C. DRAINAGE PATHWAY AND DISTANCE TO NAVIGABLE WATERS

In the event of a major fuel release, discharges from the facility have a potential for reaching the Missouri River. The facility has one area for bulk fuel, at the Fuel Station. General drainage (flow direction) and pathways area identified on the facility map. The distance to navigable water, the Missouri River, is 7200 feet in pipe, and approximately 2650 feet in the most direct path to the river.

SECTION 4 - POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL
CFR 112.7(b)
CFR 112.7 (c)

A. Bulk Oil Storage

Bulk oil products are stored in the Fuel Station, waste oil tank or within a shop. The oil products are stored in steel tanks, plastic totes or drums. In case of rupture or leakage, the products in the secondary containment areas could not access a drainage or the environment. Traffic within the facility is limited to equipment operated by staff during normal working operations, bulk oil provider and waste product removal. Past history for this facility indicates that it is highly unlikely that there would be a release from these containers. The Fuel Station tank is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station. The following list includes oil and non-oil products.

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Fuel Station-Public Works Complex	Diesel & Gasoline	Tank Rupture/ leakage	20,000 gallons	Vary	Inside Secondary Containment	Secondary Containment
Maintenance Shop	Waste Oil	Tank Rupture/ leakage	1-750 gallon	Vary	Inside Secondary Containment	Secondary Containment
	Def ISO 22241	Tote rupture/ leakage	1-330 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	ATF	Barrel rupture/ leakage	1-55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Megaplex XDS Grease	Barrel rupture/ leakage	1-55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Hydraulic Oil AW32	Tote rupture/ leakage	1-270 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	All Season Antifreeze	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Zerex HD Antifreeze	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	SAE 15W-40 oil	Tote rupture/ leakage	1-270 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Wiper Fluid	Plastic container rupture/ leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	OW20 Oil	Plastic container rupture/ leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	5W30 Oil	Plastic container rupture / leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	CAT Drive Train Oil	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Universal Tractor Oil	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Utility Shop	SAE 15W-40	Barrel rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Sorbent Material
	Stoddard Solvent	Barrel rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Sorbent Material
Sewer Jet Shop	DEF (Diesel Additive)	Rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Cold Storage Building	Kerosene	Barrel Rupture/ leakage	2-55 gallon drums	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Street Shop	Unitex Q-2 Release Agent	Tote rupture/ leakage	1-290 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Citra Clean Concentrate	Tote rupture/ leakage	1-290 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Hydraulic Oil	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Anti-freeze	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	15-40 Motor Oil	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Transmission Fluid	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Windshield Washer Fluid	Barrel rupture/ leakage	55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Diesel Tanks	Barrel rupture/ leakage	2-100 gallon	Vary	Inside Shop and Mobile	Shop/Spill Kit/Sorbent Material
	Unitex and Citra Clean Portable Tank	Plastic Container rupture/ leakage	1- 110 gallon 1- 30 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Bulk Paint	Tote rupture/ leakage	1- 55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Public Works Complex Yard	Magnesium Chloride	Plastic Tank rupture/ leakage	3-3500 gallon	Vary	Public works complex flow southwest	On-site storm drainage pond

B. Bulk Fuel Storage: Receiving and Dispensing

Fuel is typically purchased and delivered to the facility from a licensed fuel provider. The product is pumped from the tanker to the tanks. Fuel delivery trucks have over-fill prevention devices when the facility receives fuel. Also overfill protection devices on pumps for dispensing tanks. The Fuel Station tank is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station. The Fuel Station tank is a double wall 20,000 gallon aboveground storage tank.

Typically, not disconnecting fuel lines prior to vehicle departure, or any drain valves left open could result in a release. However, this facility Fuel Station has breakaway hoses and fuel is only accessible via key code which reduces the chances of a release. Due to signage, break away hoses, containment materials, etc. being immediately available, locking when facility is unattended and personnel training/knowledge, the potential for a release is minimized. The facility did not show any surface staining indicating that receiving and dispensing releases have been minimized in the past.

The waste oil tank is an aboveground double wall 750 gallon tank. waste oil tank is pumped often by a contractor for disposal. The maintenance building area provides good lighting and a paved surface. This location has readily accessible sorbent materials in the Maintenance shop. The potential for a release is minimized by the double wall tank, locking when the facility is unattended and personnel training/knowledge, and accessibility of sorbent materials.

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Fuel Station - Public Works Complex - Main Yard	Diesel & Gasoline	Tank Rupture/ leakage	20,000 gallons	Vary	(1) Inside Secondary Containment (2) Outside containment would south westerly toward storm drainage	(1)Secondary Containment and (2)Sorbent materials, Equipment
Waste Oil Tank - Outside Maintenance Building	Waste Oil	Tank Rupture/ leakage	750 gallons	Vary	(1) Inside Secondary Containment (2) Outside containment would easterly toward storm drainage	(1)Secondary Containment and (2)Sorbent materials, Equipment

C. Field Constructed Containers CFR 112.7(i)

If a field-constructed above ground container undergoes a repair, alteration, reconstruction, or a changed in service that might affect the risk of a discharge or failure due to brittle facture or other catastrophe, evaluate the container for risk of discharge or failure to brittle fracture or other catastrophe, and as necessary take appropriate action.

No field-constructed above ground containers exist on-site, therefore this section does not currently apply.

SECTION 5 - INSPECTIONS, TESTS, AND RECORDS
CFR 112.7(e)

Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC plan for a period of three (3) years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

The facility is occupied during business hours, Monday – Friday, 8 am-9 pm. Through normal facility operations, the bulk fuel storage is viewed (visual inspection) daily, through regular use, by the employees. These visual inspections include tank integrity, valves, dispensing hoses, and pump condition.

A more formal inspection is to be completed annually for the purposes of this SPCC. The inspection form is in the Section 6 Preventative Maintenance. Inspection records are kept for three years.

Hydrostatic testing (or similar method) as required by 40 CFR 112.8(c)(6) will be performed along with visual inspections focusing on potential spill sources:

- aboveground tanks
- aboveground lines
- loading/unloading areas

40 CFR 112.8(c)(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skit-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emission testing, or another system of non-destructive shell testing. You must keep comparison records and you must inspect the container's supports and foundations. Additionally, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for the purposes of this paragraph.

A recording and inspection form is provided on the following page.

INSPECTION
& RECORDING FORM

Inspection Date: _____

Inspected By: _____

- Bulk Loading/Unloading Facilities:
  - Piping, fittings, valves, supports inspected for signs of corrosion/leakage
  - Security of area checked (lighting, locks when unattended)
  - Evidence of leakage: Yes ○ No ○
    (If yes, immediate repair is necessary. Owner will determine need for completing Spill Documentation Form)
  - Evidence of corrosion/rust: Yes ○ No ○
    (If yes, consideration should be given to maintenance/painting)

- Site Drainage:
  - Drainage pathways inspected for signs of staining and odors
  - Ensure that drainage pathways are clean with no obstructions

- Secondary Containment Structures:
  - Structural integrity inspected (no signs of crack or holes)
  - Pumps, valves, filters, and fittings checked for signs of leakage

- Aboveground Storage Tanks / Lines:
  - Evidence of leakage: Yes ○ No ○
    (If yes, immediate repair is necessary. Owner shall determine need for completing Spill Documentation Form)
  - Evidence of corrosion/rust: Yes ○ No ○ N/A ○
    (If yes, consideration should be given to maintenance)
  - Inventory record-keeping and reconciliation reviewed

- Spills and Releases:
  - Have spills or releases of petroleum product been documented during this period?
    Yes ○ No ○ (If yes, attach copy of Spill Documentation Form)

This inspection certified by _____
Owner or Owner's Representative

SECTION 6 - DISCHARGE PREVENTION MEASURES
CFR 112.7(a)(3)(ii), (iii) & (iv); and CFR 112.7(c)

Per CFR 112.7 (c), an operator must provide appropriate containment and/or diversionary structures or equipment to prevent a discharge. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from primary containment system, such as a tank or pipe, will not escape the containment system before clean-up occurs. At a minimum, an operator must use one of the following prevention systems or its equivalent:

For onshore facilities:

- Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- Curbing;
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds; or
- Sorbent materials.

The City of Great Falls Public Works Complex facility utilizes secondary containment and sorbent materials for prevention systems.

Bulk Storage Tanks - Discharge Drainage Control (Secondary Containment) - CFR 112.7(a)(3)(iii)

City of Great Falls Public Works Complex provides a double walled steel tank for fuel. The consultant viewed the Fuel Station and tank specifications for the facility. Other oil products are stored in various shops on the complex. The double walled tank meets the SPCC guidelines for secondary containment. The facility also has sorbent materials located throughout the complex.

The facility is occupied during business hours Monday – Friday 8 am – 5 pm. The facility is locked after hours and has controlled gate access after business hours. There is Closed Circuit Television being utilized 24/7. The Public Works Complex is fully fenced and all buildings and vehicles are locked after business hours. Through general working operations, the bulk fuel storage is viewed (visual inspection) by City Complex employees on a daily basis during business hours. These visual inspections include tank integrity, valves, dispensing hoses, and pump condition. A more formal inspection is to be completed annually for the purposes of this SPCC. The inspection form is included at the end of this Section 6 Preventative Maintenance. Inspection records are kept for 3 years.

Other tanks in the yard include the three (3) 3500 gallon Magnesium Chloride tanks. These tanks are not oil related but are included in this document to provide personnel with a comprehensive list of tanks for evaluation.

1. TANK INSPECTION LIST - <u>Fuel Station</u>
City of Great Falls Public Works Complex
Great Falls, Montana

<u>Bulk Fuel Storage:</u>
(1) 20,000 Gallon Aboveground Storage Tank (AST) - Double Walled Tank
2 Compartment Tank = 10,000 Gallon Diesel and 10,000 Gallon Gasoline
<u>Waste Oil Storage:</u>
(1) 750 Gallon Aboveground Storage Tank (AST) - Double Walled Tank

Date of Inspection: _____Time of Inspection: _____

Inspector:_____
Print Name Signature

Reviewing Person: _____
Print Name Signature

X=satisfactory, 0=repair/adjustment needed, C=See Comment under remarks/recommendations

	20,000 Gallon Diesel/Gasoline AST	**750 Gallon Waste Oil AST**
1. No evidence of fuel in the containment area	Not Applicable	Not Applicable
2. Tank surface checked for damage/signs of leakage		
3. Tank condition good		
4. Tank foundation intact		
5. Vents not obstructed		
6. Dispensing Pump in good condition/no signs of leakage		
7. No evidence of fuel/oil around the tank or in the immediate area		
8. Dispensing of fuel observed, acceptable practices used		
9. Spill containment kit or Sorbent Material available and fully stocked		

Note: This inspection is done annually. Completed inspection forms are kept in the SPCC Plan.

Remarks/Recommendations:

2. FUEL/OIL STORAGE INSPECTION LIST - City of Great Falls Public Works Complex Great Falls, Montana

Instructions: Review the following shops and check for the listed containers and evaluate each shop based on the table below.

1. Utility Shop: *55 gallon SAE 15W-40; 55 gallon Stoddard Solvent*
2. Sewer Jet Shop: *55 gallon DEF*
3. Street Shop: *290 gallons Unitex Q-2 Release Agent; 290 gallons Citra Clean Concentrate; 80 gallons Hydraulic Oil; 80 gallons Antifreeze; 80 gallons 15-40 Oil, 80 gallon Transmission Fluid; 2-100 Diesel Tanks; 110 gallons and 30 gallons Unitex & Clean Portable Tank, 55 gallon Bulk Paint*
4. Maintenance Shop: *330 gallon Def ISO 22241; 55 gallon ATF; 55 gallon Megaplex XDS;270 gallons Hydraulic Oil; 55 gallons All Season Antifreeze; 55 gallons Zerex HD Antifreeze; 270 gallons SAE 15W-40 Oil; 80 gallons Wiper Fluid; 80 gallons OW20 Oil; 80 gallons 5W30 Oil; 55 gallons CAT Drive Train Oil; 55 gallons Universal Tractor Oil*
5. Cold Storage Building: *2-55 gallon drums Kerosene*
6. Public Works Yard *- 3-3500 gallon Magnesium Chloride tanks*

Date of Inspection: _____Time of Inspection: _____

Inspector: _____
Print Name Signature

Reviewing Person: _____
Print Name Signature

X=satisfactory, 0=repair/adjustment needed, C=See Comment under remarks/recommendations

	1. Utility Shop	2. Sewer Jet Shop	3. Street Shop	4. Maintenance Shop	5. Cold Storage Building	6. Public Works Yard
No evidence of fuel/oil in the containment area (Building)						
Tank/container surface checked for damage/signs of leakage						
Tank condition good						
Dispensing in good condition/no signs of leakage						
No evidence of fuel/oil around the tank/container or in the immediate area						
Dispensing of fuel/oil observed, acceptable practices used						
Spill containment kit or Sorbent Material available and fully stocked						

Note: This inspection is done annually. Completed inspection forms are kept in the SPCC Plan.

Remarks/Recommendations:

SECTION 7 - SITE SECURITY CFR 112.7(g)

Fencing CFR 112.7(g)(1)
Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

Fencing is currently utilized around the facility as a security measure. The intent of the fencing is to restrict access when the facility is unattended. The facility has two access points (along 25th Ave NE) that are gated and locked when the facility is closed. The tank and other oil products are all located away from the gate areas. The facility is occupied during working hours, by staff, Monday – Friday, 8am-5pm. The site is a secure facility that is locked and tanks are only accessible via keypad entry. There is Closed Circuit Television being utilized 24/7.

Past history for this facility indicate that a release from these containers has not occurred.

Valving CFR 112.7(g)(2)
Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the containers contents to the surface have adequate security measures to that they remain in the closed position when in non-operating or non-standby status.

The drain valves are in the closed position when in non-operating or non-standby status. Access to the Fuel Station is controlled via key pad entry.

Locking *CFR 112.7(g)*(3)&(4)
Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is on a non-operating or non-standby status.

Securely cap or blanket flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining inert gas pressure.

The Fuel Station is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station.

CFR 112.7(g)(5)
Facility lighting should be provided commensurate with the type and location of the facility that will assist in the:

- prevention of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and
- prevention of discharges occurring through acts of vandalism.

Lights are located throughout the property.

SECTION 8 - FACILITY UNLOADING AND DISPENSING CFR 112.7(h) & CFR 112.7 (a)(3)(ii)

Facility tank car and tank truck loading/unloading rack (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges use quick drainage system for tank truck loading and unloading areas.

(2)Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3)Prior to filling or departure of any tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

The City of Great Falls Public Works Complex utilizes bulk oil storage to provide fuel to City equipment and vehicles. The facility does have storage for waste oils, and other maintenance products for equipment and vehicles. The private contractor who supplies this facility with fuel meets DOT requirements for delivery personnel and equipment. Facility personnel must examine the bottom drains of vehicles prior to filling and departures (40 CFR 112.7 (e)(4)(iv)).

A warning sign is posted reminding personnel not to overfill fuel tanks. It is also recommended that all drivers utilize wheel chocks or blocks as another physical barrier during loading/unloading to ensure that the vehicle does not depart prior to disconnection of flexible transfer lines (40 CFR 112.7(h)(2)). A spill kit or sorbent materials is also recommended to be on-site for the loading/unloading area and portable tank (service truck) use. Spill kits were present during site review and appear available at each of these locations.

See also Section 4, Potential Spill Predications, Volumes, Rates and Control.

Bulk Fuel Storage: Receiving and Dispensing

Bulk fuel is typically purchased from a licensed fuel provider and delivered to the City of Great Falls Public Works Complex) to the on-site tanks. The product is pumped from the tanker to the tanks. Fuel delivery trucks have overfill prevention devices when the facility receives fuel. The tanks are essentially locked, fuel is only pumped via keypad entry.

Not disconnecting fuel lines prior to vehicle departure, or any drain valves left open could result in a release. This facility has standard breakaway hoses to prevent such releases. Also, due to containment materials being immediately available, locking when not attended and personnel training/knowledge, the potential for a release is minimized. The facility did not show any surface staining indicating that receiving and dispensing releases have been minimized in the past.

Field Constructed Containers CFR 112.7(i)

If a field-constructed above ground container undergoes a repair, alteration, reconstruction, or a changed in service that might affect the risk of a discharge or failure due to brittle facture or other catastrophe, evaluate the container for risk of discharge or failure to brittle fracture or other catastrophe, and as necessary take appropriate action.

No field-constructed above ground containers exist on-site, therefore this section does not currently apply.

Spill Control Equipment

Spill control equipment on site includes facility equipment (excavator, loader, etc), sorbent materials, empty pails, shovels and brooms. Spill kits are located throughout the Complex at the Fuel Station and in the shop buildings and is readily accessible in the event of a spill.

SECTION 9 - SPILL RESPONSE
CFR 112.7 (a)(3)(iv)

A. SPILL RESPONSE PLAN -

The purpose of the Spill Response Plan is to minimize the effects of any release into the environment. This is done by responding immediately to the release with the intent of confining it with adsorbent materials and keeping it from entering a natural drainage located on or near the property. Personnel are trained annually in the implementation of this plan.

Fuel

In the event of a release of fuel, the following steps are to be followed:

1. Stop the flow of product.
2. Apply sorbent materials.
3. Notify management (Owner's Representative, Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager).

Note: If the release appears that it will exceed the plant's ability to control it, the local Fire Department should be notified immediately, by dialing 911. Recovered waste products and oils can be transferred to Emerald Services (formerly Oily Waste Processors) for disposal (172 N. Manchester Rd., Great Falls, Montana 59404, 406-761-4503). Contaminated soil can be disposed at the landfill (2) High Plains Landfill, 142 Powerline Rd, Floweree, MT, 406-452-3143 ((40 CFR112.7 (3)(v)).

Oil/Other Products

In the event of a release of oil/other products, the following steps are to be followed:

1. Stop the flow of product.
2. Cover the floor drain, or surround floor drain with absorbent material to prevent oil from entering drain.
3. Utilize absorbent materials to prevent spills from leaving shop building(s).
4. Apply absorbent materials to spill.
5. Notify management (Owner's Representative, Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager).

B. EMERGENCY SPILL EQUIPMENT

As part of this SPCC Plan, City of Great Falls Public Works Complex is prepared to contain and recover spills on its property. They have the following equipment and materials for spill recovery:

- secondary containment around tanks
- Absorbent materials - for containment and recovery of small spills
- empty pails, shovels, brooms and other equipment to assist in the containment of a spill
- facility equipment
- stockpiled materials such as soils to contain any spill

These materials and equipment have been selected by the Owner and/or Owner's Representative as the most suitable items for responding to a spill event. They are maintained at the facility with immediate accessibility. The list of equipment and materials will continue to be upgraded with changing technologies and as the Owner identifies other areas of concern at the facility.

C. SPILL REPORTING AND EMERGENCY CONTACTS - CFR 112.7(a)(3)(vi)
Any release that reaches a drainage must be reported immediately to the following:

Paul Skubinna, Spill Response Coordinator City of Great Falls Environmental Division Manager	1-406-727-8390
National Response Center:	1-800-424-8802
MT DEQ Leak Hotline NOTE: You must report to a live person. Leaving a message does not constitute a report.	1-800-457-0568 Friday 8am-5pm 1-406-324-4777 After hours and holiday

Montana State Emergency Response Commission (SERC) Contacts

Mr. Bob Habeck
Montana DEQ
P.O. Box 200901
Helena, MT 59620-0901
Phone: 406-444-7305
Email: bhabeck@mt.gov

Ms. Delila Bruno
Montana Disaster & Emergency Services
PO Box 4789
Fort Harrison, MT 59636-4789
Phone: 406-324-4777
Email: dbruno@mt.gov
MTDES@mt.gov

Local Emergency Response:	911
Local Fire Department:	911
Local Hospital	Benefis Emergency Room 1101 26th St S, Great Falls, MT (406) 455-5000 Great Falls Clinic Emergency Room 3010 15th Ave. S, Great Falls, MT (406) 216-8082
NCI Engineering Co.	1-406-453-5478

D. SPILL REPORTING & DOCUMENTATION - CRF 112.7(a)(4)

The facility's Owner and/or Owner's Representative is responsible for all reporting and related documentation procedures. All personnel will immediately report spill events to the Owner. The Owner will then make the determination of what action must be taken.

1. The Owner, when notified of the spill, will complete a spill documentation form included at the end of this section. The Owner will evaluate the potential impact to the drainage ditch and surface water, groundwater, private utilities, and other similar pathways.

2. Within 24 hours of the release, the Owner will notify the state DEQ - Petroleum Release Section. Monday through Friday 8am to 5 pm at 1(800)457-0568; after hours and holidays call 1 (406)324-4777.The leak must be reported to a live person, leaving a message does not constitute a report.

3. If it is concluded that the spill has the potential to reach navigable waters by way of the city storm drain system, the Owner will immediately contact the National Response Center (NRC) at (800)424-8802. The Owner will then file a copy of the spill documentation form with the U.S. Environmental Protection Agency - Water Division.

SPILL DOCUMENTATION FORM - CFR 112.7(a)(4)

1. Release product
   - ○ Diesel
   - ○ Gasoline
   - ○ Antifreeze
   - ○ Solvent
   - ○ Other _____

   Release volume
   - ○ 0-10 gallons
   - ○ 10-100 gallons
   - ○ 100-1000 gallons
   - ○ 1000 - 10,000 gallons
   - ○ > 10,000 gallons

   Did release reach drainage?
   - ○ yes ○ no

   If so, was release harmful quantity?
   - ○ yes ○ no

2. Facility Name & Location:

3. Date of Release: _____ Time: _____ ○ A.M ○ P.M.

4. Receiving Watercourse or Structure:

5. Structure or Vessel Releasing Product:

6. Description of Physical Damages or Injuries:

7. Cause of Release:

8. Actions being used to stop, remove, mitigate the effects of the release:

9. Volume of Product Recovered: _____ Gallons

10. Evacuation Needed ○ YES ○ NO

11. Cost of Damages
    - ○ $0 - $100
    - ○ $100 - $1,000
    - ○ $1,000 - $10,000
    - ○ > $10,000

12. Action Taken to Prevent Recurrence:

13. Contacts/Agencies Notified:

Spill Reported by _____

Documented by _____
Owner or Owner's Representative

SECTION 10 - PERSONNEL, TRAINING, AND DISCHARGE PREVENTION CFR 112.7 (f)

General

At a minimum, train oil handling personnel in the operation and maintenances of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules and regulations; general facility operations; and the contents of this facility's SPCC plan.

The facility should designate at least one person who is accountable for discharge prevention and who reports to facility management.

Schedule and conduct discharge prevention briefings for oil handling personnel at least once a year to assure adequate understanding of the SPCC plan. The briefings should also address and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

Personnel Training and Spill Prevention Procedures

This SPCC Plan and/or procedures should be reviewed with any new personnel so that new personnel are shown the spill response materials and how to respond to a release.

Yearly, all affected personnel should be given refresher training.

Anyone who is required to fuel vehicles should receive specific training in how to prevent spills during the fueling operation, and how to respond if there is release. A copy of this training is part of this SPCC.

Copies of the training guideline and yearly tests are included in this Training Section of the SPCC.

The designated person who are accountable for spill prevention are: Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager, Owner's Representative.

Annual Training/Review

All new personnel will be trained in spill prevention and response which includes a review of the SPCC Plan. Annually, all affected personnel receive a review of how to prevent spills and how to respond. This training covers the procedures listed in the Spill Response Section. Any affected employee is required to take a test on the covered material.

Personnel who are assigned to dispense fuel receive training in the requirements for fueling operations. This training includes:

1. Stop engine.
2. Inspect dispensing hose and pump for leaks.
3. Dispense fuel. DO NOT OVERFILL TANK!!
4. Remain within arm's length of the filling hose.
5. Close valve when fueling is complete.
6. Lock tanks when facility is not attended.

The facility Owner and/or Owner's Representative is responsible for conduction this training and maintaining written records of such training, if the facility has any personnel that will assist in fueling operations.

SPILL PREVENTION, CONTROL AND COUNTERMEASURE
Annual Training/Review

Name:

_____

Print Signature

Date:

_____

Person Conducting Training:

_____

T or F City of Great Falls Public Works Complex has the capacity to store more than 1,320 gallons of oil products.

T or F City of Great Falls Public Works Complex is required to have an SPCC plan in place.

T or F SPCC is an acronym for Spill Prevention, Control and Countermeasure.

T or F Never call 911 when responding to a spill.

T or F If an oil spill occurs the facility SPCC plan has local, state and federal contact numbers listed.

How many stationary bulk fuel tanks are located on City of Great Falls Public Works Complex. property?_____

How many mobile fuel tanks does the City of Great Falls Public Works Complex. operate?_____

Has the facility bulk fuel or petroleum system changed where a SPCC revision is required?_____

Where are spill kits/sorbent materials located for this facility?_____

SECTION 11 – SPILL HISTORY

The subject facility is not known to have experienced any oil spill events exceeding 1,000 gallons and no two discharges within any twelve month period in the three years prior to the effective date of the SPCC plan.

Appendix A

Facility Photographs

Fuel Station & Dispensers, View Facing West

Street/Sanitation, Maintenance Shop

Fuel station, View Facing North

Parking Area, Looking North

Maintenance Shop, Street/Sanitation

Street & Sanitation

Fuel Station

Fuel Station Spill Kit

Fuel Station

Fuel Station

Equipment Storage, Looking West

Dispenser at Fuel Station

Fuel Station Tank, Bollards, and Lights Looking West

Parking Area & Equipment S Storage Buildings

Fuel Station Dispensing

Parking, Water Dept. Looking South

Lighting at Fuel Station

Equipment Storage Bldgs.

Parking Area Looking SE, Toward Water Dept. and Maintenance

Parking Lot

Parking & Equipment Storage

Storm Drainage to Storm Inlet

Parking & Utilities

Exit of Public Works

Engineering Bldg. & Maintenance Shop

Entrance to Public Works Complex

Public Works Complex Operations & Engineering Office

Appendix B

40 CFR 112.7 Cross Reference Matrix

40 CFR 112.7 Cross-Reference Matrix	
40 CFR 112.7 Section	**Location in SPCC Plan**
112.7 (a)(1) Conformance with Requirements	Executive Summary, Pg i
112.7 (a) (2) Deviations	N/A
112.7 (a)(3) Facility Diagram	Pg 8, Section 3
112.7 (a)(3)(i) Type of Oil in Each Container	Pg 10, Section 3 - B. Facility Storage Capacity
112.7 (a) (3)(ii) Discharge Prevention Measures	Pg 17, Section 6 Discharge Prevention Measures & Pg 21, Section 8 Facility Unloading and Dispensing
112.7 (a) (3)(iii) Discharge Drainage Control	Pg 17, Section 6 Discharge Prevention Measures & Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(iv) Other Drainage Control	Pg 17, Section 6 Discharge Prevention Measures & Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(v) Methods of Disposal	Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(vi) Contact List & Phone Numbers	Pg 25, Spill Reporting and Emergency Contacts
112.7(a) (4) Information and Procedures Reporting Spills	Pg 26, D. Spill Reporting and Documentation
112.7 (b) Equipment Failure	Pg 12, Section 4 Spill Predictions
112.7 (c) Discharge Prevention	Pg 12, Section 4 Spill Control
112.7 (d) Equivalent Environmental Protection	N/A
112.7 (e) Inspections and Tests	Pg 15, Section 5 Inspections, Tests and Records
112.7 (f) Training	Pg 28, Section 10 Personnel Training and Discharge Prevention
112.7 (g) Security	Pg 20, Section 7 Site Security
112.7 (h) Facility tank car/tank truck loading/unloading	Pg 21, Section 8 Facility Unloading and Dispensing
112.7 (i) Field Construction Containers	Pg 14, No field construction containers

Appendix C

SPCC Plan 5 Year Review Page

SPILL PREVENTION CONTROL AND COUNTERMEASURE
COMPLIANCE INSPECTION PLAN
CFR 112.5

REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, City of Great Falls Public Works Complex will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan will be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil or diesel fuel into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates Signature

1. _____

2. _____

3. _____

4. _____

5. _____

Appendix D

40 CFR 112.7 Regulations

§112.7(a)(2). For each determination of impracticability of secondary containment pursuant to §112.7(d), the Plan must clearly explain why secondary containment measures are not practicable at this facility and provide the alternative measures required in §112.7(d) in lieu of secondary containment. By certifying each measure allowed under §112.7(a)(2) and (d), the Professional Engineer attests:

(A) That he is familiar with the requirements of this part;

(B) That he or his agent has visited and examined the facility; and

(C) That the alternative method of environmental equivalence in accordance with §112.7(a)(2) or the determination of impracticability and alternative measures in accordance with §112.7(d) is consistent with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part.

(ii) As described in paragraph (b)(3) of this section, the facility owner or operator may not self-certify measures as described in §112.9(c)(6) for produced water containers and any associated piping. Such measures must be reviewed and certified, in writing, by a licensed Professional Engineer, in accordance with §112.3(d)(1)(vi).

(iii) The review and certification by the Professional Engineer under this paragraph is limited to the alternative method which achieves equivalent environmental protection pursuant to §112.7(a)(2); to the impracticability determination and measures in lieu of secondary containment pursuant to §112.7(d); or the measures pursuant to §112.9(c)(6) for produced water containers and any associated piping and appurtenances downstream from the container.

[73 FR 74302, Dec. 5, 2008, as amended at 74 FR 58810, Nov. 13, 2009]

§112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Except as provided in §112.6, your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your

Plan, following the procedures in §112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under §112.1(d)(11). You must also address in your Plan:

(i) The type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in §112.1(b).

(4) Unless you have submitted a response plan under §112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in §112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in §112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under §112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in §112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either

active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing or drip pans;

(iii) Sumps and collection systems;

(iv) Culverting, gutters, or other drainage systems;

(v) Weirs, booms, or other barriers;

(vi) Spill diversion ponds;

(vii) Retention ponds; or

(viii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) Provided your Plan is certified by a licensed Professional Engineer under §112.3(d), or, in the case of a qualified facility that meets the criteria in §112.3(g), the relevant sections of your Plan are certified by a licensed Professional Engineer under §112.6(d), if you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11) to prevent a discharge as described in §112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under §112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

(e) *Inspections, tests, and records.* Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(f) *Personnel, training, and discharge prevention procedures.* (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) *Security (excluding oil production facilities).* Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.

(h) *Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).*

(1) Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks or vehicle

brake interlock system in the area adjacent to a loading/unloading rack, to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

(k) *Qualified Oil-filled Operational Equipment.* The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this subsection may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this sub-section in lieu of general secondary containment required in paragraph (c) of this section.

(1) *Qualification Criteria—Reportable Discharge History:* The owner or operator of a facility that has had no single discharge as described in §112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in §112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war or terrorism); and

(2) *Alternative Requirements to General Secondary Containment.* If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must:

(i) Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and

(ii) Unless you have submitted a response plan under §112.20, provide in your Plan the following:

(A) An oil spill contingency plan following the provisions of part 109 of this chapter.

(B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

[67 FR 47140, July 17, 2002, as amended at 71 FR 77292, Dec. 26, 2006; 73 FR 74303, Dec. 5, 2008; 74 FR 58810, Nov. 13, 2009]

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

SOURCE: 67 FR 47146, July 17, 2002, unless otherwise noted.

§112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) *Facility drainage.* (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the

Appendix E

Documentation of Oil Products

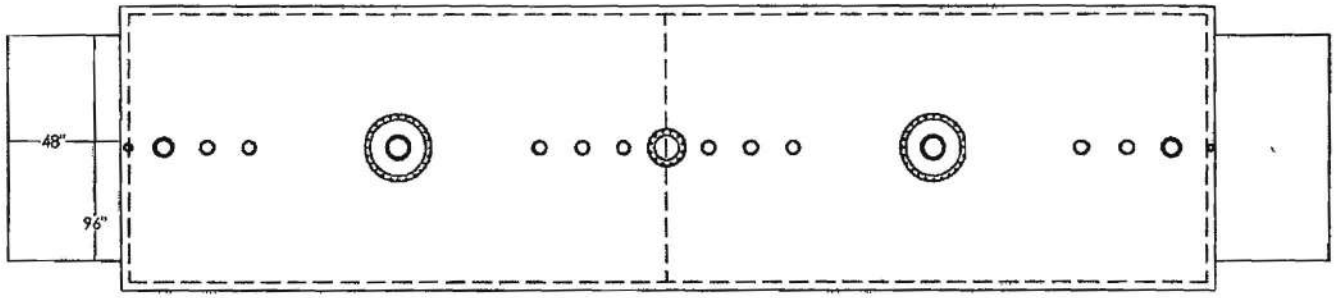
MATERIAL AND CONSTRUCTION CONFORM TO UNDERWRITERS LABORATORIES STANDARD U.L. 2085. SECONDARY CONTAINMENT PROTECTED ABOVEGROUND TANK.

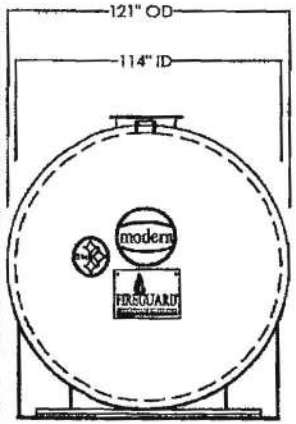
FIRE RESISTANT PER U.L. 2085

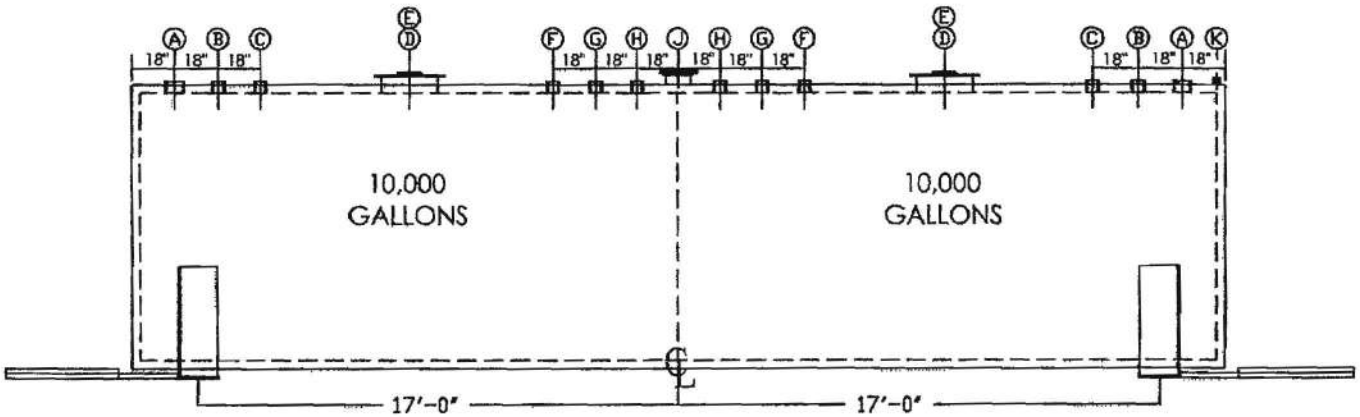
BULLISTIC RESISTANT PER U.L. 2085

IMPACT RESISTANT PER U.L. 2085

U.L. LABEL FOR PROTECTED SECONDARY CONTAINMENT ABOVEGROUND TANK IS REQUIRED. CARB EXECUTIVE ORDER VR-302-C.







MEETS 2013 CBC
MEETS 2012 IBC

INNER TANK: PER U.L.
OUTER TANK: PER U.L.

INTERIOR: BARE, CLEAN OF DEBRIS
EXTERIOR: WHITE POLYURETHANE

AIR TEST AT NOT LESS THAN 3 PSI NOR MORE THAN 5 PSI. PRIMARY TANK TO BE TESTED ALONE. SECONDARY TANK TO BE PRESSURE TESTED WITH PRESSURE IN PRIMARY TANK. THIS SHALL BE ACCOMPLISHED BY BLEEDING AIR FROM THE PRIMARY TANK INTO THE SECONDARY TANK.

AT NO TIME SHALL THE PRESSURE IN THE SECONDARY TANK EXCEED THE PRESSURE IN THE PRIMARY TANK.

SIZE	O.D.	LENGTH	WEIGHT
20,000	121"	38'-9"	50,000#

MARK	QTY.	SIZE	TYPE	REMARKS
A	2	6"	FNPT	FILL
B	2	4"	FNPT	
C	2	4"	FNPT	
D	2	24"		MANWAY
E	2	8"	FNPT	PRI. E-VENT
F	1	8"	FNPT	SEC. E-VENT
G	2	4"	FNPT	
H	2	4"	FNPT	
J	2	4"	FNPT	
K	1	2"	MNPT	MONITOR

SCHEDULE OF OPENINGS

NO. REQD.: ONE (1) ITEM NO.: FG20000

modern welding company of california, inc.
4141 N. BRAWLEY AVE. FRESNO, CA 93722
PH. 559-275-9353 FAX 559-275-4381

NORTHWEST FUEL SYSTEMS
20,000 GALLON U.L. 2085 FIREGUARD TANK

DWN. BY	JC	DATE 6/23/17	SCALE: NONE
CHK. BY		JOB NO.	DWG. NO. 14340
APP. BY		P.O. NO.	SHT. NO. 1 OF 1

Underwriters Laboratories Inc.®

Northbrook, Illinois • (847) 272–8800
Melville, New York • (516) 271–6200
Santa Clara, California • (408) 985–2400
Research Triangle Park,
North Carolina • (919) 549–1400
Camas, Washington • (360) 817–5500

CERTIFICATE OF COMPLIANCE

CERTIFICATE NUMBER: 090198 - MH17883
ISSUE DATE: September 1, 1998

Issued to: Steel Tank Institute
570 Oakwood Road
Lake Zurich, IL 60047

Report Reference: MH17883

This is to Certify that representative samples of: Protected Aboveground Tanks for Flammable and Combustible Liquids, with 3" and 6" Insulation

Have been investigated by Underwriters Laboratories Inc. in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL2085, Protected Aboveground Tanks for Flammable and Combustible Liquids

Additional Information: "Fireguard" protected secondary containment aboveground tanks for Flammable and Combustible Liquids. These are secondary containment aboveground steel tanks with a layer of insulating material in the annular space. These tanks have been proven to meet the requirements outlined in UL 2085 including: Two Hour Full Scale Fire Test, Ballistics/Projectile Test, Vehicle Impact Test, Hose Stream Test, Pool Fire Test and Interstitial Communication Test. These tanks are intended for stationary installation in accordance with the Flammable and Combustible Liquids code, NFPA 30, the Automotive and Marine Service Station Code, NFPA 30A, and the Standard for Installation of Oil Burning Equipment, NFPA 31 for the National Fire Protection Association, and/or the Uniform Fire Code.

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes four elements as follows: the name "Underwriters Laboratories Inc." in various forms and type styles, or abbreviations such as "Und. Lab. Inc.", or the symbol "UL in a circle" - (UL) ; the word " Listed"; a control number (may be alphanumeric) assigned by UL; and the product or category name (product identifier), as indicated in the appropriate UL Directory.

LOOK FOR THE UL LISTING MARK ON THE PRODUCT

Engineer: LISA DEVERA
Underwriters Laboratories Inc.

Review Engineer: WAYNE DOVERSBERGER
Underwriters Laboratories Inc.

Modern Welding Company, Inc.

Visit our Website: www.modweldco.com "Request A Quote"

Subsidiaries Nationwide

LONG FORM: Section 13205
Guide Specification
Modern Welding Company, Inc.
Modern "Fireguard" "Insulated Secondary Containment Rectanglar Aboveground Tank for Flammable Liquids, Protected Type."

PART I General

1.01 Related Work Specified in Other Sections

A. Cast-In-Place Concrete: Section 03300
B. Anchor Bolts: Section 05501
C. Liquid Level Gauges: Section 15174
D. Piping: Section 15064
E. Painting: Section 09900

1.02 Quality Assurance

A. Acceptable Manufacturer: Modern Welding Company, Inc.

B. Governing Standards:

1. U.L. 142, Underwriters Laboratories, Inc., Steel Aboveground Tanks for Flammable and Combustible Liquids.
2. U.L. 2085, Underwriters Laboratories 2 Hour Fire Rating's Standard for Insulated Aboveground Storage Tanks for Flammable and Combustible Liquids.
3. NFPA 30, National Fire Protection Association Flammable and Combustible Code.
4. NFPA 30A, National Fire Protection Association Automotive and Marine Service Station Code.
5. Uniform Fire Code International Fire Code Institute.
6. B.O.C.A. National Fire Prevention Code.
7. NFPA 31, Standard for Installation of Oil Burning Equipment.

1.03 Submittals

A. Shop Drawings: Contractor shall submit _____ copies of shop drawings for each tank, location of fittings, and accessories with specific dimensions shall be shown on all drawings.
B. Drawing Approval: Contractor shall receive drawing approval prior to product fabrication.
C. Catalog Data: Contractor shall submit _____ current copies of manufacturer's literature.
D. Certification: Each tank shall bear the U.L. 2085 label for "Insulated Secondary Containment Aboveground Tank for Flammable Liquids."

PART II Products

2.01 Modern Quality "Fireguard" Insulated Secondary Contained Aboveground Storage Tanks

A. Materials

1. Only new material shall be used in the manufacturing process, and the

manufacturer shall ensure that the material used meets all appropriate specifications and quality assurance requirements.

B. Dimensional Requirements(Cylindrical Tanks)

1. Nominal capacity of the tank(s) shall be _____gallons.
2. Nominal inner tank diameter of the tank(s) shall be _____ inches.
3. Overall length of inner tank(s) shall be _____feet, _____ inches.
4. Minimal material thickness of the tank(s) shall be per UL-142 requirements.
5. Minimum annular space insulation thickness material to be 3".with only UL-2085 listed insulation material shall be used.

Dimensional Requirements Rectangular Tanks)

1. Nominal capacity of the tank(s) shall be _____gallons.
2. Nominal inner tank width of the tank(s) shall be _____ inches.
3. Nominal inner tank height of the tank(s) shall be _____ inches.
4. Overall length of inner tank(s) shall be _____feet, _____ inches.
5. Minimal material thickness of the tank(s) shall be per UL-142 requirements.
6. Minimum annular space insulation thickness material to be 3". Only UL-2085 listed insulation material shall be used.

C. Loading Conditions: Tanks shall meet the following design criteria.

1. Internal Load: Rectangular Tank(s) shall withstand an air pressure test of 1.5 to 2 psi, cylindrical tanks shall be able to withstand an air pressure test of 3 to 5 psi.
2. Tank(s) shall be designed to support accessory equipment such as ladders, pumps, floating suction, etc. when installed according to manufacturer's instructions and limitations.
3. Tank(s) shall be provided with suitably designed and located lifting lugs which have a 2:1 safety factor.

D. Product Storage Requirements

1. Tank(s) shall be capable of storing liquids with a specific gravity up to 1.0.
2. Tank(s) is designed for operation at atmo spheric pressure only. Both inner and outer tanks shall have openings of sufficient size to meet normal and emergency venting requirements stated in U.L. 142, UFC and NFPA.
3. Tank(s) shall be capable of storing gasoline, gasohol, jet fuel, avgas, diesel fuel, methanol or fuel oil at ambient temperatures.

2.02 Accessories

A. Certification Plate: Underwriters Laboratories label "Insulated Secondary Containment Aboveground Tank for Flammable Liquids." shall be affixed to each tank.

B. Fittings: Threaded/NPT

1. All threaded fittings shall be of a material of construction consistent with the requirements of the Underwriters Laboratories. All fittings shall be protected using threaded plugs or suitable closure caps.
2. Fittings Schedule:

Use	Size	Type
____	____	____
____	____	____
____	____	____

3. Location: Refer to drawings.

C. Fittings: Flanged Nozzles

1. All flanged nozzles shall be of a material of construction consistent with the

Modern Welding Company of Florida, Inc.
Orlando FL (407) 843-1270
Modern Welding Company of Texas, Inc.
Houston, TX (713) 675-4211
Modern Welding Company of Texas, Inc.
Rhome, TX (817) 636-2215
Modern Welding Company of Iowa, Inc.
Burlington, IA (319) 754-6577
Modern Welding Company of California, Inc.
Fresno, CA (559) 275-9353
Modern Welding Company of Georgia, Inc.
Augusta, GA (706) 722-3411

Fireguard® (U.S. Pat. No. 5,695,089)
INSTALLATION, TESTING & MAINTENANCE INSTRUCTIONS

1.0 TANK SITE EVALUATION AND PREPARATION PRIOR TO INSTALLATION

1.1 The foundation must be designed to support the tank plus 100% of its contents when full. The foundation design shall also take into account the type of support that is being used and the point load associated with that support. The foundation may be constructed using concrete, asphalt, gravel or other stable material and must include provisions in its design to prevent tank movement. The foundation should include any provisions necessary for seismic design.
The foundation design must also include provision for draining surface water away from the tank.

1.2 For tank installations without cathodic corrosion protection, the tank should be grounded in accordance with applicable electrical and fire code standards.

1.3 Where the steel tank body is in contact with the earth, use a zinc grounding rod. Do not use a copper grounding rod.

1.4 Where the steel tank body is in contact with the earth or foundation, it should be protected from external corrosion. For external corrosion protection using cathodic corrosion protection, consult applicable standards (i.e., National Association of Corrosion Engineers) to provide the tank with appropriate protection from lightning without interference with the corrosion protection. Steel tanks in contact with the earth should not use copper grounding. Refer to STI R893-89, "Recommended Practice for External Corrosion Protection of Shop Fabricated Aboveground Storage Tank Floors."

1.5 Tanks located in areas subject to flooding must be protected against floatation.

1.6 Aboveground tanks should not be located above underground utilities or directly beneath overhead power lines.

1.7 The tank shall be protected from vandalism and accidental damage in accordance with all applicable codes, i.e., NFPA 30, NFPA 30A, UFC, etc. as well as local environmental regulations and safety codes. Consult local authorities before installing this tank.

2.0 TANK HANDLING

2.1 Do not handle or install the tank without having knowledge and experience in procedures involved with proper and safe installation of an aboveground tank used for storage of stable, flammable and combustible liquids.

2.2 Equipment for handling the tank shall be of adequate size to lift and position the tank. DO NOT DROP OR DRAG THE TANK.

2.3 Tanks shall be carefully handled using cables or chains of adequate length (with spreader bars, if necessary) and size. Attach to the tank using the lifting lugs provided. Care should be taken that the angle between the two cables, at the lift point, shall be no greater than 60 degrees.

2.4 DO NOT HANDLE OR MOVE THE TANK UNLESS IT IS EMPTY.

2.5 This is a stationary tank. Do not use this tank for transport of any product.

3.0 TESTING

3.1 General Requirements

3.1.1 An on-site air test of the tank may be required by local authorities to ensure no damage has occurred in shipping and handling. All testing shall be done as described below.

3.1.2 Vacuum monitored double wall tanks are shipped from the manufacturer with a vacuum drawn on the space between the walls. Read and record the vacuum pressure. If the vacuum gauge reading is less than 12 inches

Hg (40.5 kPa), contact the original tank manufacturer.

3.1.3 In lieu of the air pressure test described below, a vacuum may be applied to the interstice of a double-wall tank or to the interstice of a double-bottom tank. DO NOT APPLY A VACUUM TO THE PRIMARY TANK OF A DOUBLE-WALL TANK OR TO A SINGLE-WALL TANK. A vacuum of 7" to 10" Hg is to be applied to the interstice and held for at least 24 hours with no more than a 2" Hg vacuum loss allowed. If this vacuum cannot be held for 24 hours, then perform the air test procedure described below.

3.1.3.1 Caution must be taken in applying a vacuum to the interstice of a tank and the testing must be stopped if any deformation appears on the tank.

3.2 Air Pressure Test Procedure for Tanks

3.2.1 Remove emergency vents and cap openings to hold tank pressure as required.
NOTE: Use only calibrated air pressure gauges with a 0-15 psig (0-103 kPa) dial span. The relief valve must have a flow rate at the set pressure that is greater than the flow rate of the air supply line. The regulated air supply test pressure used for this test should be as follows:

a. **Horizontal cylindrical tanks** - Not less than 3 psig (20.7 kPa) nor more than 5 psig (34.5 kPa). Set the pressure relief valve in the test air supply line at 5.5 psi (38 kPa).

b. **Vertical tanks**-Not less than 1½ psig (10.4 kPa) nor more than 3 psig (20.7 kPa). Set pressure relief valve in test air supply line at 3 psig (20.7 kPa).

c. **Rectangular tanks**-Not more than 1-1/2 psig (10.4 kPa). Set pressure relief valve in test air supply line at 1-1/2 psig (10.4 kPa).
CAUTION: Do not leave pressurized tank unattended while the pressure line/air line is connected. Do not stand in front of tank heads or fittings when pressurizing tank.
Pressurizing of large tanks may result in the slight deformation of the top and bottom of vertical tanks, of the sides of rectangular tanks, and of the heads and ends of cylindrical tanks. Should deformation appear severe, immediately relieve the pressure.

3.2.2 Tank Pressurizing Procedure

3.2.2.1 The following air pressure testing does not apply to double-wall tanks equipped with interstitial vacuum monitoring systems. (In lieu of the air pressure test, the tank may be shipped from the factory with a vacuum in the tank interstice. Read and record the vacuum pressure. If the vacuum pressure gauge reading is less than 12 inches Hg (40.5 kPa), contact the tank manufacturer).

3.2.2.2 Install test piping as shown in Figure 2. Close valves A and B. Open valve C. Temporarily plug, cap or seal off remaining tank openings to hold pressure.

3.2.2.3 Connect the regulated test air supply line to test piping as shown in Figure 2.

3.2.2.4 Close valves B and C. Slowly open valve A to pressurize the primary tank. Pressure gauge 1 should indicate test air pressure given in Section 3.2.1 above.

3.2.2.5 Close valve A. Disconnect the regulated test air supply line from the test piping.

3.2.2.6 Monitor test pressure in the primary tank for 1 hour minimum. A steady drop in pressure reading for gauge 1 indicates there may be a leak in the primary tank. Check the fittings, the gauge, and then retest. If the problem persists, contact the tank manufacturer.

3.2.2.7 If no leaks are found, close valve C and slowly open valve B to pressurize the interstitial space between the double walls of the tank.
WARNING: Do not apply air pressure to the interstitial space between the walls of a double wall tank without air pressure in the primary tank. Do not apply air pressure to the interstitial space that is higher than the air pressure in the primary tank. Damage to the tank may result.
Pressure gauge 1 will indicate a slight drop in test pressure when valve B is opened, but should hold steady at the lower pressure. If the test pressure drops below the minimum requirements, close valve B, reconnect the air supply line and slowly open valve A to increase the pressure in the primary tank. When the required pressure is indicated on gauge 1 close valve A, disconnect the test air supply line. Open valve B to equalize pressure in the primary tank and the interstitial space. Gauge 1 and gauge 2 should have the same pressure reading.

3.2.2.8 Close valve B. Hold the test pressure in the interstitial space for 1 hour minimum. A steady drop in pressure gauge 2 indicates there may be a leak in the interstitial space. Check the fittings, the gauges, and then retest. If the problem persists, contact the tank manufacturer.

3.2.2.9 Proceed to Section 3.2.3, "Detection of Leaks" below.

3.2.3 Detection of Leaks

3.2.3.1 Immediately apply the leak test solution to the tank exterior surfaces, welds, fittings, etc. Check for leaks. No leaks are allowed. If leaks are found, notify the tank manufacturer. If no leaks are found, testing of the tank is complete.

3.2.3.2 Open valve C, then slowly open valve B to release the test air pressure.

3.2.3.3 With the tank depressurized, remove the test piping, temporary plugs, caps and seals. Reinstall the emergency relief vents, etc. which were removed in Section 3.2.1 above. Emergency vents are required on both the primary tank and the secondary tank.
WARNING: Emergency relief vents must be operable to prevent causing tank failure by over-pressurization.

4.0 TANK PIPING AND ACCESSORIES

4.1 Install all permanent piping and fittings using compatible, non-hardening thread sealant material.

4.2 All unused tank openings must be properly sealed and tested to be liquid and vapor tight prior to putting the tank into service.

4.3 DO NOT WELD ON THE TANK, MODIFY OR PENETRATE THE TANK STRUCTURE IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE TANK MANUFACTURER.

4.4 All tank accessories shall be installed as required per local codes. Anti-siphon devices, overfill shut-offs and alarms, vents gauges, emergency vents, etc. are common requirements for tanks storing motor fuels for the purpose of being dispensed into motor vehicles.

5.0 LABELING

5.1 Tanks shall be labeled in accordance with all applicable codes.

6.0 MAINTENANCE

6.1 The tank operator should perform periodic walk-around inspections to identify and repair areas of damage to the vessel or the coating itself and check for proper drainage around the tank area.

6.2 It is imperative that the tank exterior be inspected periodically to ensure that the integrity of the coating is maintained. The frequency of periodic repainting will be based upon environmental factors in the geographic area where the tank is located. Special consideration should be given to the selection of the paint, surface preparation and coating application. The coating selected should be suitable for use with the current coating, or the existing coating should be removed. The coating selected should be of industrial quality.

6.3 Proper site preparation and maintenance are vital to ensure drainage of surface water. Should ground conditions change or settlement occur, take the appropriate steps to maintain proper drainage and prevent standing water near or under the tank area.

6.4 The primary tank shall be inspected monthly for the presence of water at the lowest possible points inside the primary tank. Remove any water found. Water and sediment in fuel can cause plugging of filters. Also, bacterial growth, originating from the fuel can cause corrosion of tanks and lines. For procedures on how to check for the presence of water and removal of water, refer to API Recommended Practice 1621, Appendix D and API Standard 2610. Another source of information is a report by the US Department of Energy Brookhaven National Laboratory, BNL 48406, which provides information on methods to test for and remove water, test for bacterial presence in fuel, tank cleaning and fuel additives.

6.5 This tank must be removed from service if damaged by fire exposure, other physical means or misuse.

6.6 Failure to adhere with these maintenance instructions may void your warranty.

6.7 Tank relocation requirements - often aboveground storage tanks are relocated. The following instructions are to be followed when this occurs: All steps are to be documented and the documentation is to be kept for the life of the tank.

6.7.1 The hazards associated with the cleaning, entry, inspection, testing, maintenance or other aspects of ASTs are significant. Safety considerations and controls should be established prior to undertaking physical activities associated with ASTs. Cleaning of tanks must be per state and local jurisdiction requirements.

6.7.2 Refer to the STI Standard SP001, "Standard for the Inspection of Aboveground Storage Tanks" for requirements concerning tank inspections. This SP001 Standard details requirements for inspections based on the tank installation and age. A tank must undergo the appropriate inspection prior to relocation.

6.7.3 In addition, the tank must be subjected to a pressure (or vacuum) test as detailed paragraph 3.2 above except an inert gas, such as nitrogen, should be used for tanks that have previously held fuel.

Disclaimer

These instructions are intended only as an aid to tank installers who are knowledgeable and experienced in aboveground tank installation. Compliance herewith does not necessarily meet the requirements of applicable federal, state and local laws, regulations and ordinances concerning tank installation. STI makes no warranties, express or implied, including but not limited to, any implied warranties of merchantability or fitness for a particular purpose, as a result of these installation instructions.

These instructions are intended only as an aid to tank installers who are knowledgeable and experienced in aboveground tank installation. Compliance herewith does not necessarily meet the requirements of applicable federal, state and local laws, regulations and ordinances concerning tank installation. STI makes no warranties, express or implied, including but not limited to, any implied warranties of merchantability or fitness foe a particular purpose, as a result of these installation instructions.

Fireguard® Limited Warranty Validation Card

Please complete this form to validate your Limited Warranty. This card must be completely and accurately filled out and returned to STI within 30 days after the tank is installed, or within 90 days after the tank is shipped from the manufacturer, whichever comes first. Warranty limitations may exist based on the product stored in the tank, please refer to the limited warranty document supplied with this form. By signing this form, the tank owner verifies that the tank was installed in accordance with STI Installation Instructions, the product stored is compatible with the tank, and the owner has read and agrees with the terms of the Limited Warranty, included with this form.

Fireguard Label #: _____ **Shipment Date:** _____

Manufacturer's Name: _____ **Installed Date:** _____

TANK LOCATION INFORMATION

Name of Facility (where tank is installed): _____

Street address: _____

City: _____ **State:** _____ **ZIP:** _____ **Country:** _____

Contact: _____ **Phone:** _____

Check Product(s) Stored in this Tank:

- ☐ Wastewater or Water
- ☐ Heating Oil (Petroleum #1, #2, #4, #5 WHICH IS NOT HEATED)
- ☐ Diesel fuel or kerosene for powering motor vehicles
- ☐ Diesel for powering generators
- ☐ Gasoline
- ☐ Alcohol Blended Gasoline
- ☐ AVGAS
- ☐ Biodiesel
- ☐ Crude Oil
- ☐ Oil/Water Separator
- ☐ Jet Fuel
- ☐ E85
- ☐ Waste Oil
- ☐ Other: _____
- ☐ Product which is heated during storage _____
- ☐ #6 Heated Oil

Check Type of Facility Where Tank is Installed:

- ☐ Private Residence
- ☐ Farm/Nursery
- ☐ Gas Station
- ☐ Convenience Store
- ☐ Jobber
- ☐ Quick Lube
- ☐ Car Dealer
- ☐ Fleet Owner
- ☐ Other _____
- ☐ Hospital
- ☐ School
- ☐ Government
- ☐ Marina
- ☐ Airport
- ☐ Industrial Site
- ☐ Utility Site

MAILING ADDRESS FOR TANK OWNER

Owner name: _____ **Phone:** _____

Mailing address: _____ **P.O. Box :** _____

City: _____ **State:** _____ **Zip:** _____

INSTALLER INFORMATION

Installation Company Name: _____ **Phone:** _____

SIGNATURE REQUIRED

My signature below verifies that this tank was installed in accordance with STI Installation Instructions, the product stored is compatible with the tank and I have read and agree with the terms of the Limited Warranty, provided with this document.

Signature (of person providing this information): _____ **Date:** _____

Please Print Name: _____

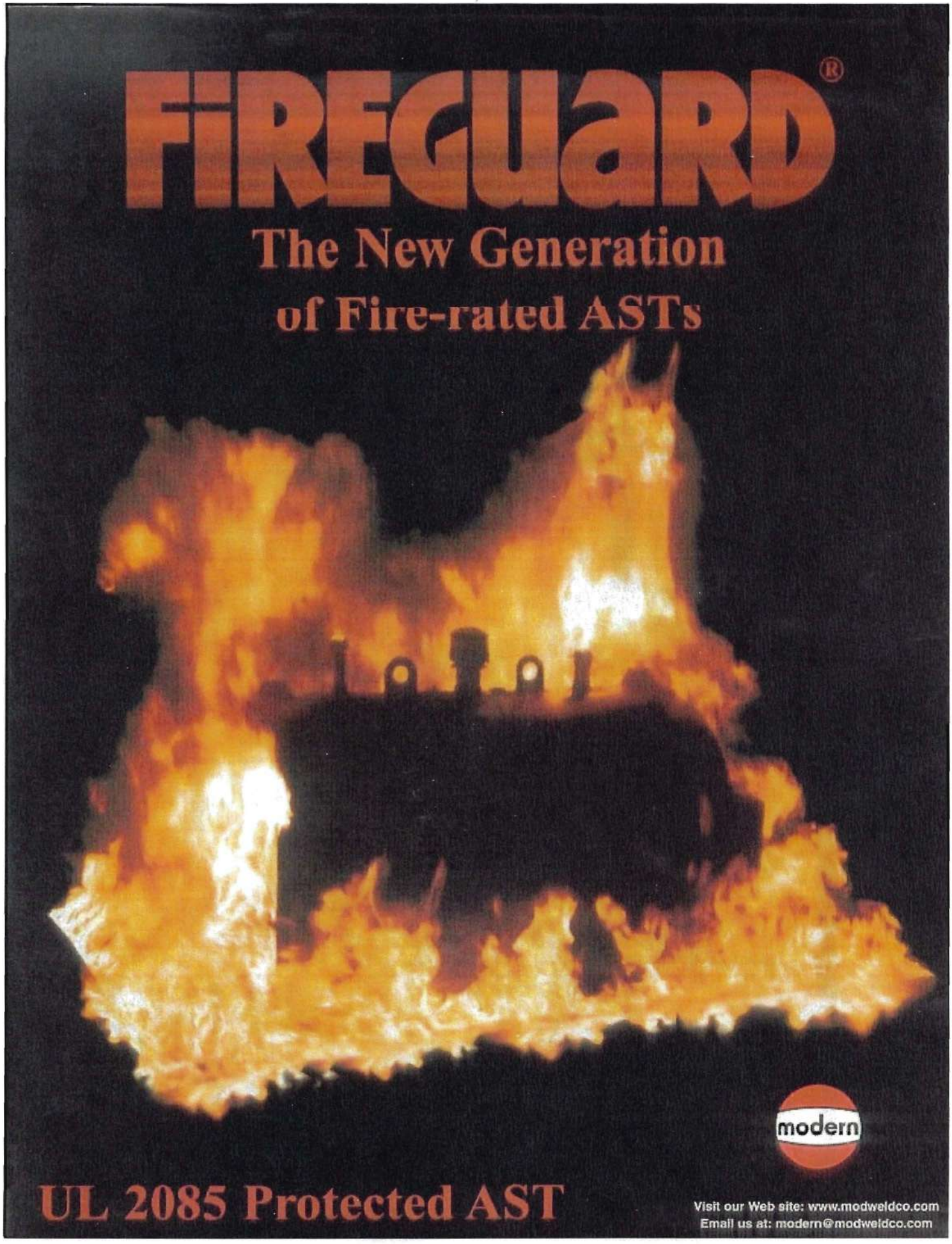
Company Name: _____ **Phone:** _____

Thank you for completing this document and returning it to the STI address below:

STEEL TANK INSTITUTE • 944 Donata Court • Lake Zurich, IL 60047 • 847/438-8265 • FAX 847/438-8766

FIREGUARD®

The New Generation of Fire-rated ASTs



modern

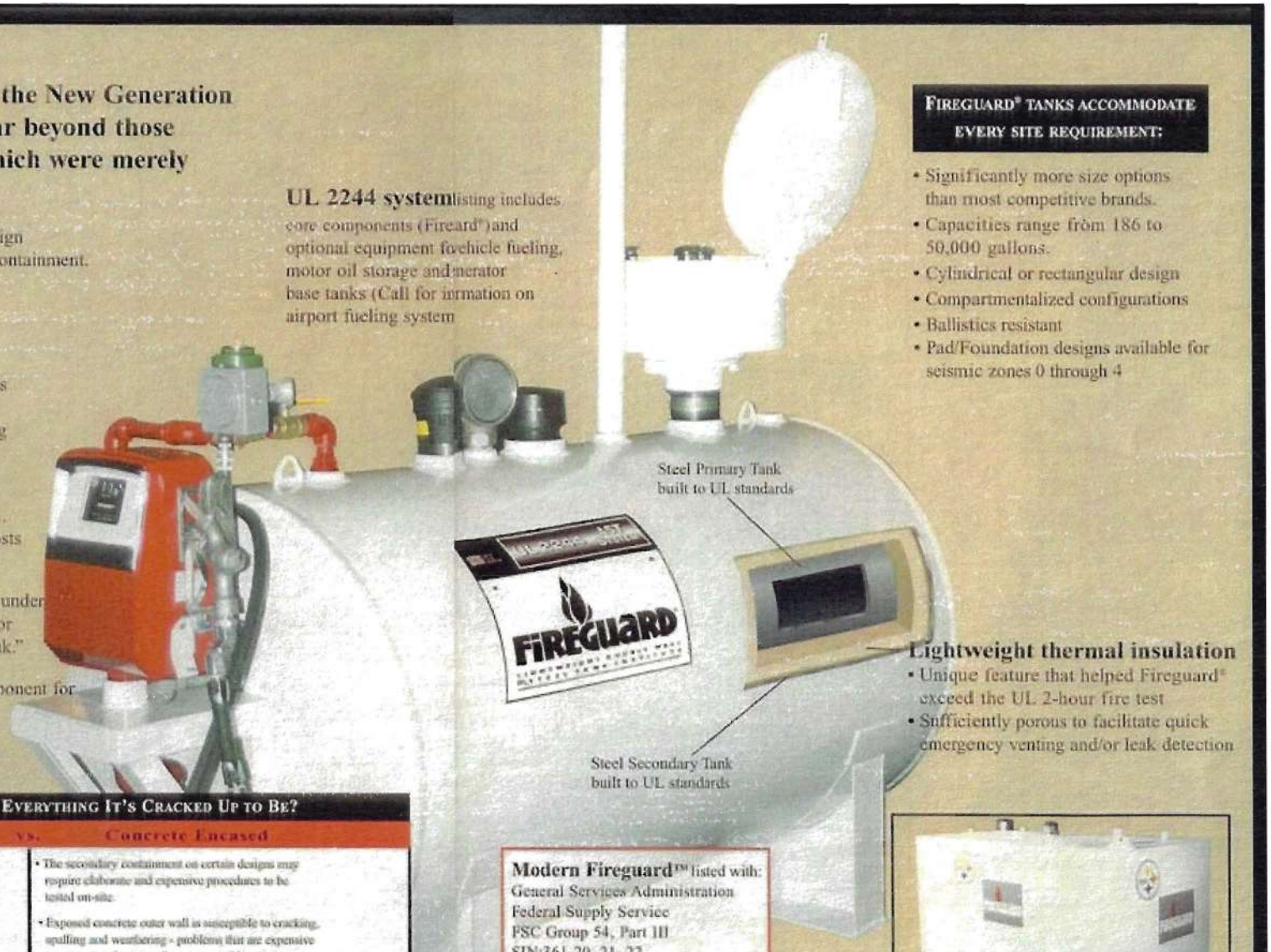
UL 2085 Protected AST

Visit our Web site: www.modweldco.com
Email us at: modern@modweldco.com

FIREGUARD® is the New Generation of fire-rated ASTs, going far beyond those "first generation" tanks which were merely enclosed in concrete.

- Fireguard® was the first AST of its design to obtain a UL Listing for secondary containment.
- Fireguard®'s secondary containment can be tightness tested on-site with standard testing procedures!
- Fireguard®'s exterior steel wall provides superior weatherability and low-cost maintenance. Unlike concrete, cracking or spalling will never be a problem!
- Fireguard®'s unique thermal insulating material is 75% lighter than concrete... shipping, installation and relocation costs are reduced!
- The Fireguard® technology is patented under U.S. Patent #5695089 and #5809650 for "Lightweight Double Wall Storage Tank."
- Fireguard® is a UL approved core component for the 2244 system listing

UL 2244 system listing includes core components (Fireard®) and optional equipment for vehicle fueling, motor oil storage and generator base tanks (Call for information on airport fueling system



FIREGUARD® TANKS ACCOMMODATE EVERY SITE REQUIREMENT:

- Significantly more size options than most competitive brands.
- Capacities range from 186 to 50,000 gallons.
- Cylindrical or rectangular design
- Compartmentalized configurations
- Ballistics resistant
- Pad/Foundation designs available for seismic zones 0 through 4

Lightweight thermal insulation

- Unique feature that helped Fireguard® exceed the UL 2-hour fire test
- Sufficiently porous to facilitate quick emergency venting and/or leak detection

Modern Fireguard™ listed with:
General Services Administration
Federal Supply Service
FSC Group 54, Part III
SIN:361-20, 21, 22
Contract No: GS-07F-0134K

IS YOUR ABOVEGROUND TANK EVERYTHING IT'S CRACKED UP TO BE?

FIREGUARD®	vs. Concrete Encased
• Secondary containment is testable on-site using standard, economical testing procedures.	• The secondary containment on certain designs may require elaborate and expensive procedures to be tested on-site.
• Fireguard®'s steel outer wall provides low-cost maintenance and protects the insulation material from weathering.	• Exposed concrete outer wall is susceptible to cracking, spalling and weathering - problems that are expensive to correct and are usually not covered by warranty.
• An average 12,000 gallon Fireguard® weighs under 30,000 pounds - well within the legal load limit for trucking.	• An average 12,000 gallon concrete-encased tank weighs upwards of 100,000 pounds - imagine the hassles involved in handling that tank.
• 30-year warranty is standard with every Fireguard®.	• Some manufacturers may charge extra for a 30-year warranty.

FIREGUARD® SPECIFICATIONS

CYLINDRICAL DESIGN

SAMPLE OUTER TANK DIMENSIONS (inches)				SAMPLE OUTER TANK DIMENSIONS (inches)			
GALLONS	DIAMETER	LENGTH	APPROX. WEIGHT (lbs.)	GALLONS	DIAMETER	LENGTH	APPROX. WEIGHT (lbs.)
186	48	54	1,750	4,000	90	174	12,300
250	48	68	2,100	5,000	102	168	13,750
300	50	72	2,350	6,000	102	198	15,500
500	60	76	3,100	8,000	102	258	20,000
560	60	84	3,350	10,000	102	330	24,500
1,000	70	78	3,800	12,000	102	390	28,000
1,500	70	114	5,500	15,000	126	312	34,500
2,000	70	150	6,500	20,000	126	414	39,500
2,500	70	186	7,900	25,000	126	516	49,000
3,000	70	222	9,000	30,000	126	618	74,000

RECTANGULAR DESIGN

	SAMPLE OUTER TANK DIMENSIONS (inches)			
GALLONS	LENGTH	WIDTH	HEIGHT	APPROX. WEIGHT (lbs.)
186	44	44	55	2,100
250	117	36	36	3,100
250	78	50	36	2,800
500	140	51	36	4,800
750	140	72	35	6,100
1,000	127	72	36	4,300
1,000	88	72	50	3,800
1,500	124	88	43	5,400
2,000	140	86	50	6,300
2,000	140	72	60	6,100
2,500	140	88	60	7,000
3,000	250	72	50	10,900
3,000	117	102	72	8,800
4,000	331	72	50	14,100
4,000	154	102	72	10,900
5,000	336	72	60	15,600
5,000	191	102	72	13,100
6,000	402	72	60	18,400
6,000	228	102	72	15,200
8,000	370	102	60	21,500
8,000	302	102	72	19,400
10,000	460	102	60	26,300
10,000	376	102	72	23,700
12,000	451	102	72	27,900
15,000	386	102	102	36,500
18,000	462	102	102	42,900
24,700	465	137	102	51,650

Note: Consult manufacturer for exact dimensions. Weights shown may vary.

FIREGUARD®: THE ONLY TANK THAT MEETS ALL OF THESE STANDARDS

- UL 2085 Listed as both a "Protected" and a "Fire-Resistant" AST
- UL Listed Secondary Containment comes standard with every tank
- Both the Inner and Outer steel tanks are built to UL standards
- Uniform Fire Code UFC - Article 79 as a "Protected Tank"
- UL 2244 Aboveground Flammable Liquid Tank System
- National Fire Protection Association (NFPA) 30 & 30A
- Ballistics protection per UFC Article 79, and per UL2085
- Impact protection per UFC Article 79, and per UL 2085
- California Air Resources Board (CARB) testing requirements for air emissions
- Steel Tank Institute (STI) Standard F941 for Thermally Insulated Aboveground Storage Tanks

➢ Fireguard® comes with a 30-year warranty, and is backed by a third-party insurance company
➢ Fireguard® warranty remains in force if tank is relocated by the same owner
➢ STI's Independent quality control inspectors further ensure consistently high fabrication standards

MODERN WELDING COMPANY OF GEORGIA, INC.
300 Prep Phillips Dr., Augusta, GA 30901
Phone: (706) 722-3411 Fax: (706) 724-8133

MODERN WELDING COMPANY OF TEXAS, INC.
715 Sakowitz Street, Houston, TX 77020
Phone: (713) 675-4211 Fax: (713) 673-4062
200 North Main, Rhome, TX 76078
Phone: (817) 636-2215 Fax: (817) 636-2680

MODERN WELDING COMPANY OF FLORIDA, INC.
1801 Atlanta Avenue, Orlando, FL 32806
Phone: (407) 843-1270 Fax: (407) 423-8187

MODERN WELDING COMPANY OF CALIFORNIA, INC.
4141 North Brawley Avenue, Fresno, CA 93722
Phone: (559) 275-9353 Fax: (559) 275-4381

MODERN WELDING COMPANY OF IOWA, INC.
2818 Mt. Pleasant Road, Burlington, IA 52601
Phone: (319) 754-6577 Fax: (319) 754-8428

MODERN WELDING COMPANY OF OHIO, INC.
72 Waldo Street, Newark, OH 43055
Phone: (740) 344-9425 Fax: (740) 344-6018

MODERN WELDING COMPANY OF OWENSBORO, INC.
1450 East Parrish Avenue, Owensboro, KY 42303
Phone: (270) 683-5323 Fax: (270) 684-5245

Visit our Web site: www.modweldco.com
Email us at: modern@modweldco.com

Regional Shipments reduce shipping costs!

FACILITY SPCC PLAN INFORMATION

4509 North Star Blvd., Great Falls, MT 59405 • Ph: (406) 453-5478 or 1-800-220-2703
Email: crystalm@nciengineering.com or spettis@nciengineering.com

NCI Engineering

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Owner or Operator Name _____

Owner or Operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Oil Storage Containers Maintenance Shop

Oil Storage Containers and Capacities

Include a complete list of all oil storage containers (aboveground containers[a] and completely buried tanks) with capacity of 55 U.S. gallons or more. For mobile/portable containers, provide an estimated number of containers, types of oil, and anticipated capacities. 12

Oil Storage Container *(indicate whether aboveground (A) or completely buried (B))*	Type of Oil	Shell Capacity (gallons)
A Tote	Def ISO 22241	330
A Drum Secondary	ATF	55
A Drum [redacted]	Mega plex XDS Grease	55
A Tote	Hydraulic oil AW 32	270
A Drum	All season Antifreeze	55
A Drum	Zerex HD anti freeze	55
A Tote	SAE 15W-40 oil	270
A Tote Secondary	Wiper fluid	80
A Tote Secondary	0W20 oil	80
A Tote Secondary	5W30 oil	80
A Drum	CAT Drivetrain oil	55
A Drum	Universal Tractor oil	55

Total Aboveground Storage Capacity[c] 1440 Gallons
Total Completely Buried Storage Capacity _____ Gallons
Facility Total Oil Storage Capacity 1440 Gallons

[a] Above ground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

FACILITY SPCC PLAN INFORMATION

4509 North Star Blvd., Great Falls, MT 59405 • Ph: (406) 453-5478 or 1-800-220-2703
Email: crystalm@nciengineering.com or spettis@nciengineering.com

NCI Engineering

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Owner or Operator Name _____

Owner or Operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Oil Storage Containers

Oil Storage Containers and Capacities

Include a complete list of all oil storage containers (aboveground containers[a] and completely buried tanks) with capacity of 55 U.S. gallons or more. For mobile/portable containers, provide an estimated number of containers, types of oil, and anticipated capacities.

Oil Storage Container *(indicate whether aboveground (A) or completely buried (B))*	**Type of Oil**	**Shell Capacity (gallons)**
(A) N.W corner of Utility Shop	SAE 15W-40	55 gallons (Barrel)
(A) N.W corner of Utility Shop. Spill kit + Containment For Both.	Stoddard Solvent	55 gallons (Barrel)
(A) West Wall of Sewer Jet Shop Spill Kit + Containment	DEF (diesel Additive)	55 gallons (Barrel)
(A) No Containment Center of Cold Storage building	Kerosene	(2) 55 gallons (Barrels)
In front of Central garage	Waste oil	500 gallon

Total Aboveground Storage Capacity[c] _____ Gallons

Total Completely Buried Storage Capacity _____ Gallons

Facility Total Oil Storage Capacity _____ Gallons

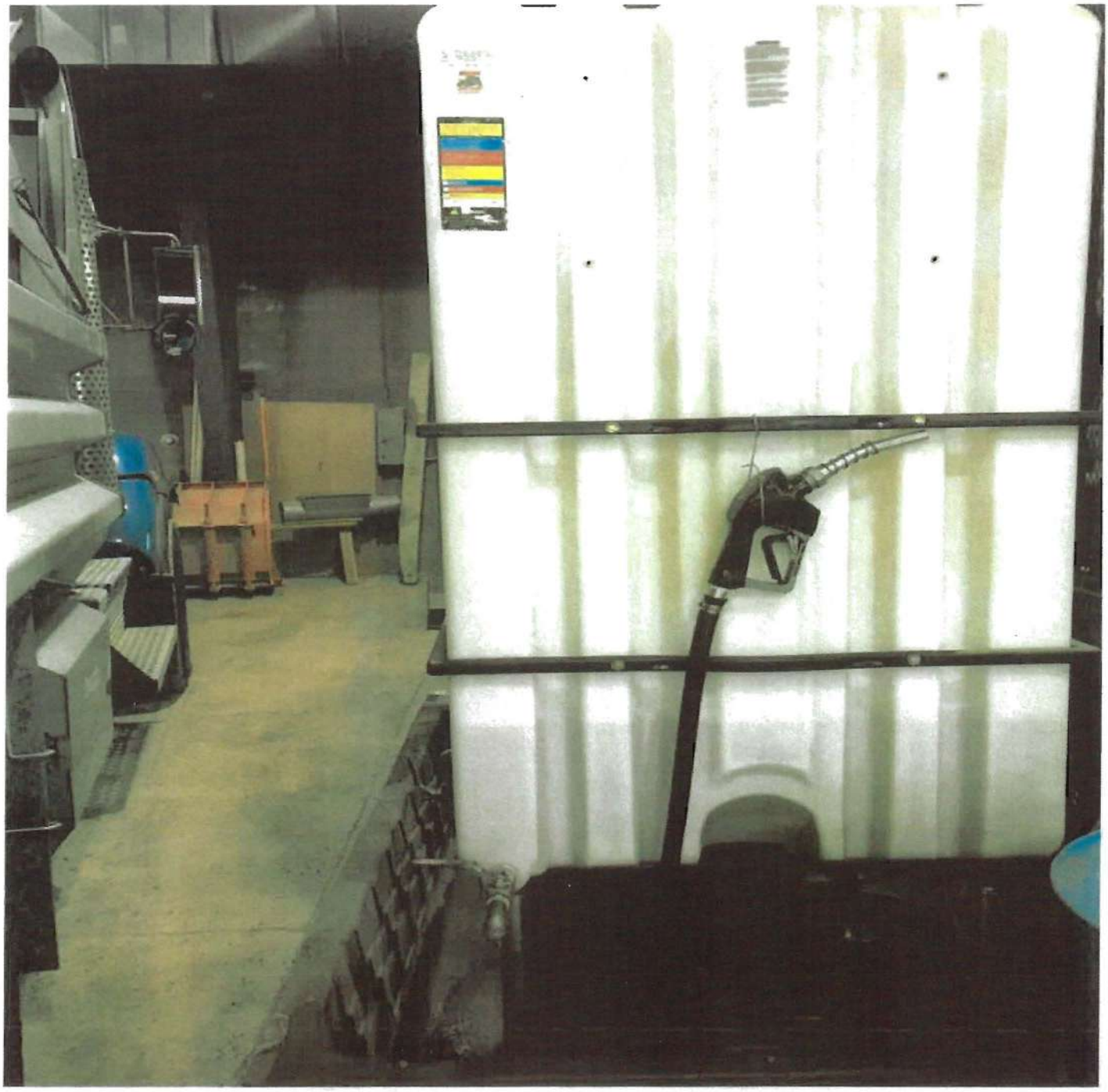
[a] Above ground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

Street Division Products

Table of Contents

Unitex Q-2

Unitex Q-2 is an asphalt release agent. It is stored in a 290 gallon container standing in a liquid containment shell that is 7'6"x4'6"x15". This Containment shell is shared with Citra Clean.



Citra Clean Concentrate

Citra Clean when mixed with water at a ratio of 5:1 (5 parts water) is stored in a 290 gallon container standing in a liquid containment shell that is 7'6"x4'6"x15". This containment shell is shared with Unitex Q-2.

Anti-Freeze

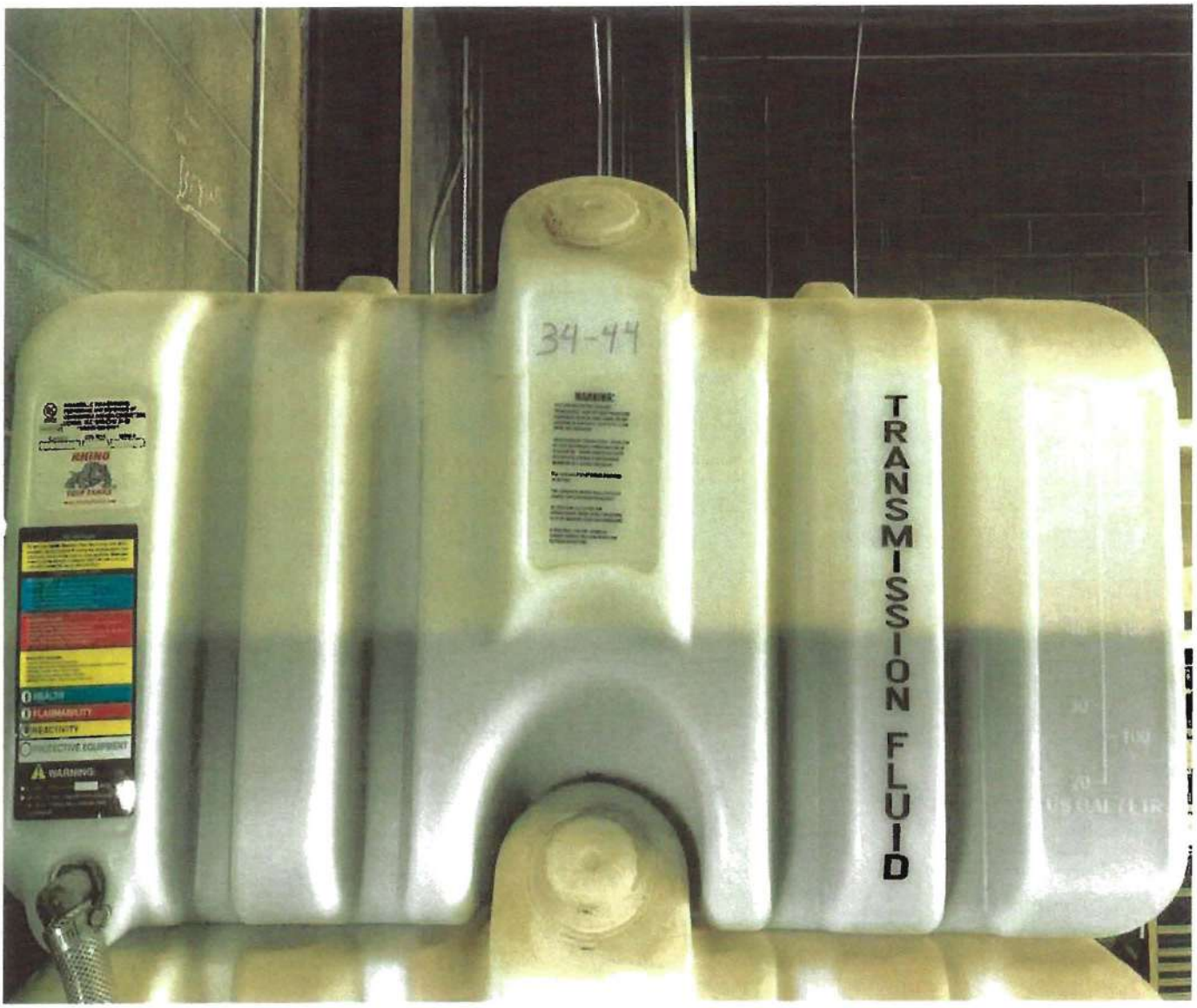
When mixed 1:1 with water, Anti-Freeze is stored in an 80 gallon container.

Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"

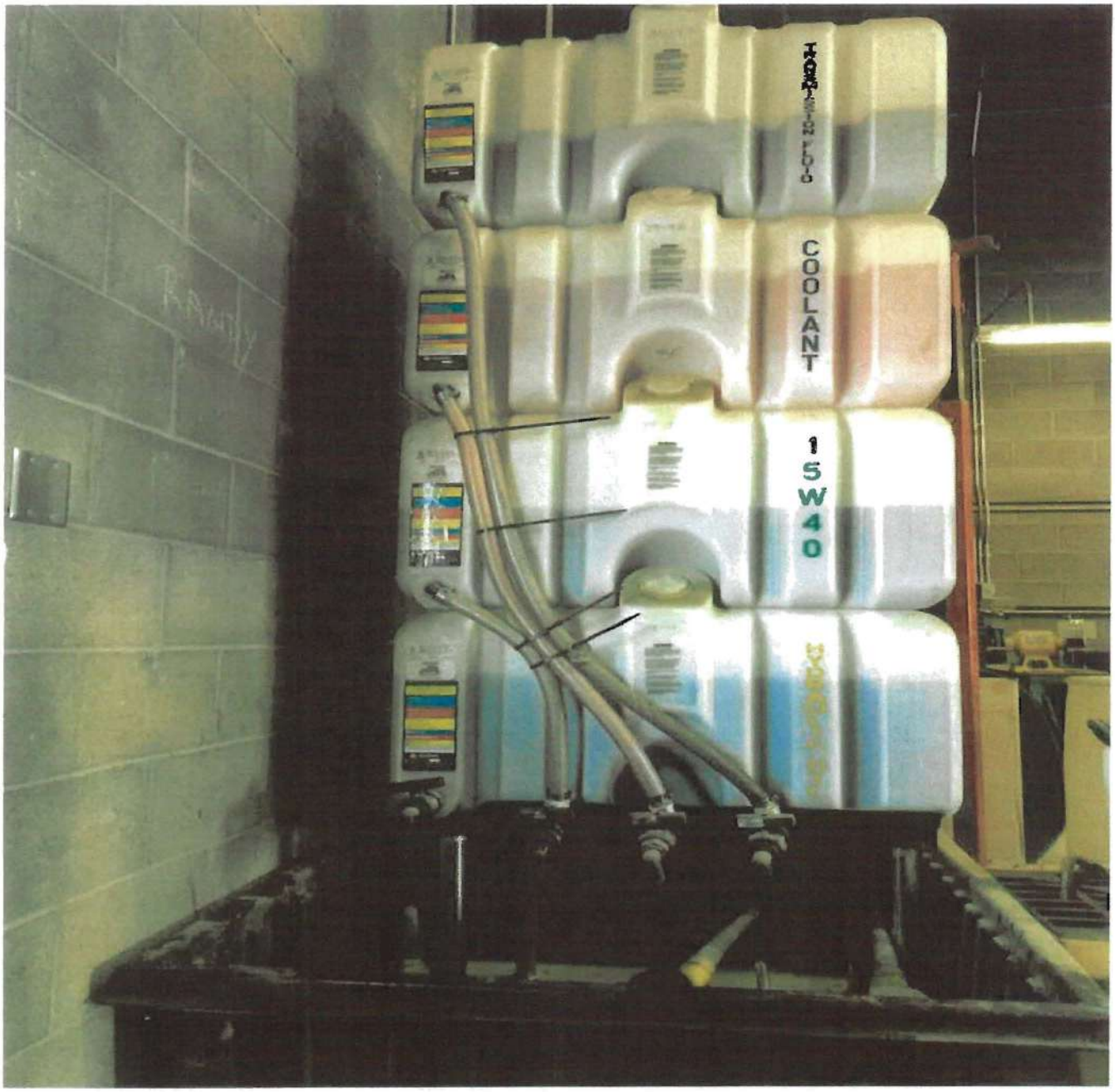
Transmission Fluid

Transmission fluid is stored in an 80 gallon container.

Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"

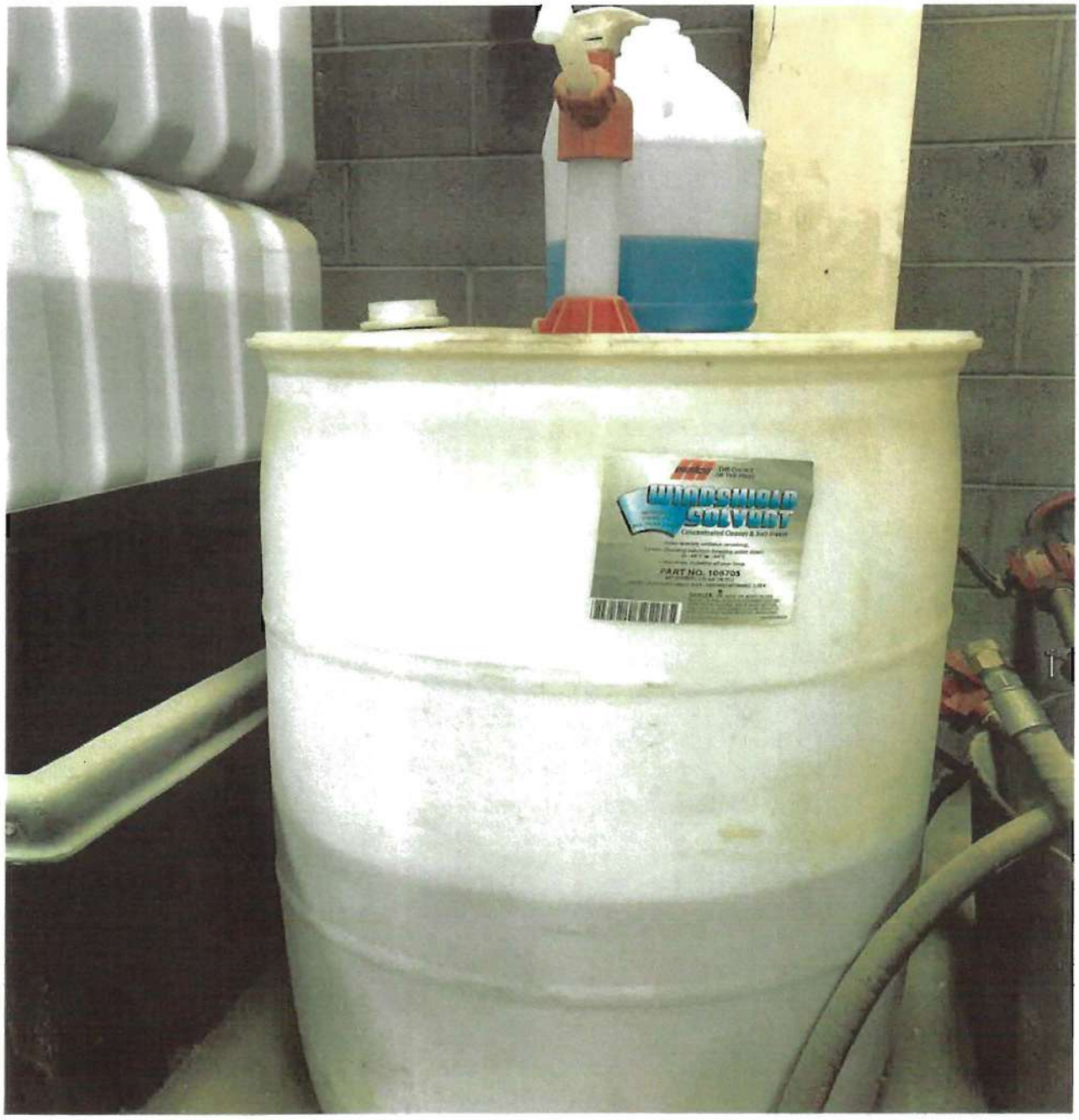


Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"



Windshield Washer Fluid

Washer Fluid is stored in a 55 Gallon Drum



Unitex and Citra Clean Portable Tank

Unitex and Citra Clean are stackable tanks Unitex is a 110 Gallon tank and Citra Clean is a 30 Gallon tank. They are stored in truck 802 during summer months. They share the same containment shell that measures 64"x41"x16".

Crystal Morgan

From: Russell Brewer [rbrewer@greatfallsmt.net]
Sent: Thursday, March 14, 2019 8:35 AM
To: 'Crystal Morgan'
Subject: PW Complex SPCC Plan
Attachments: 20190312_125522.jpg; 20190312_125757.jpg

Hi Crystal,

Here are the photos I have of the fuel station, if you need more or others let me know we can get those to you.

Just found out this morning that we do have two portable 100 gallon fuel tanks in the Street Department.

Thanks for your assistance with this project.

Russell Brewer, P.E.
Senior Civil Engineer
P.O. Box 5021
1025 25th Ave NE
Great Falls, MT 59403
Phone 406-455-8129
Fax 406-771-0700
rbrewer@greatfallsmt.net

Safety Data Sheet

ENNIS-FLINT
A Traffic Safety Solutions Company

according to OSHA Hazard Communication
29 CFR Part 1910.1200

according to Regulation (EC)
No. 1907/2006 Article 31

Section 1. Identification

Product Code: 985222

Product Name: WB YEL HI BUILD 1952E3 98PA30

Product Type: WB Paint

Recommended Use: Traffic Markings

Supplied by:
Ennis-Flint
A Traffic Safety Solutions Company
115 Todd Court
Thomasville, NC 27360
T: 800.331.8118 (For Technical Inquiries)

Emergency Telephone: Chemtrec 1-800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: No Information

Classification

Symbol(s) of Product

No GHS Symbols Exist

Signal Word

GHS Named Chemicals On Label
No GHS Named Chemicals exist in this product

Section 3. Composition/Information on ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Ammonium hydroxide	1336-21-6	0.1-1.0	GHS05-GHS07	H302-314-335

Chemical Name	CAS-No.	EINECS No.	REACH Reg No.	M-Factors
Ammonium hydroxide	1336-21-6	215-647-6	not available	0

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air. Consult a physician if symptoms persist.

FIRST AID - SKIN CONTACT: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and

launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

Section 6. Accidental release measures

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment. Ensure adequate ventilation. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically. Keep in suitable and closed containers for disposal.

Section 7. Handling and storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid dust formation.

STORAGE: Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Ammonium hydroxide	25 ppm	35 ppm		

Name	Percentage	VME mg/m3	VME ppm	OEL Nota
No hazardous items exist				

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

SKIN PROTECTION: Protective gloves

EYE PROTECTION: Safety glasses with side-shields.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance:	clear	**Physical State:**	Liquid
Odor:	Ammonia	**Odor Threshold:**	Not Established
Density, g/cm3:	0.999	**pH:**	10-12
Freeze Point, °C:	NI	**Viscosity:**	NI
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	NI
Decompostion Temp., °C:	NI		
Boiling Point, °C:	N.I.	**Explosive Limits, vol%:**	N.I.
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>94
Evaporation Rate:	Slower than Diethyl Ether	**Auto-ignition Temp., °C:**	NI
Vapor Density:	Heavier than air	**Vapor Pressure:**	NI

(See "Other information" Section for abbreviation legend)

Section 10. Stability and reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Dust formation. Do not freeze.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

Section 11. Toxicological information

Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Sanding and grinding dust may be harmful if inhaled.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name according to EEC	Oral LD50	Dermal LD50	Gas LC50
1336-21-6	Ammonium hydroxide	350 mg/kg rat	> 2000 mg/kg	>20001 ppm

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated.

Further Ecological Information
Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name according to EEC	Bio. Conc. Factor (BCF)	Octanol-water par. Coeff (KOW)
1336-21-6	Ammonium hydroxide	not available	not available

Section 13. Disposal considerations

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not re-use empty containers.

European Waste Code: 080199 waste, not otherwise specified

Uncleaned Packaging

European Waste Code: 150110 packaging dangerous residuals

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Road Transport

UN Number:	not regulated
ADR/RID Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Road Tunnel Transport Code:	not regulated

Sea Transport

UN Number:	not regulated
IMDG/GGVSee Class:	not regulated
EmS-No:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Marine Pollutant:	Not A Marine Pollutant
Shipping Hazard(Marine Pollutant):	No Information

Air Transport

UN Number:	not regulated
ICAO/IATA Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information

Section 15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: Non-controlled

Denmark

B-Value: 0.000000

France

Storage Conditions: No Information

Professional Illness Table:

CAS Number	Chemical Name	Professional Illness
1336-21-6	Ammonium hydroxide	not available

Germany

VbF-Class: No Information

WGK-class: 1

Remarks:
WGK 0 = in general not a water pollutant
WGK 1 = weak water pollutant
WGK 2 = water pollutant
WGK 3 = severe water pollutant

Processing restrictions:*

Incident Regulation:
No Information

Spain

Storage Conditions: No Information

Switzerland

VOC-Value: 0.00

United Kingdom

Storage Conditions: No Information

Section 16. Other information, including date of preparation of the last revision

Revision Date: 1/10/2016 **Supercedes Date:** 1/8/2016

Reason for revision: Substance and/or Product Properties Changed in Section(s):
09 - Physical & Chemical Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Personal Protection:	X

NFPA Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Hazards:	N.I.

Volatile Organic Compounds, gr/ltr: 1,030

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS05 

GHS07 

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

Safety Data Sheet

ENNIS-FLINT
A Traffic Safety Solutions Company

according to OSHA Hazard Communication 29 CFR Part 1910.1200

according to Regulation (EC) No. 1907/2006 Article 31

Section 1. Identification

Product Code: 985201

Product Name: WB WHT FAST DRY 1952E 1/2

Product Type: WB Paint

Recommended Use: Traffic Markings

Supplied by:
Ennis-Flint
A Traffic Safety Solutions Company
115 Todd Court
Thomasville, NC 27360
T: 800.331.8118 (For Technical Inquiries)

Emergency Telephone: Chemtrec 1-800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: No Information

Classification

Symbol(s) of Product

No GHS Symbols Exist

Signal Word

GHS Named Chemicals On Label
No GHS Named Chemicals exist in this product

Section 3. Composition/Information on ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Ammonium hydroxide	1336-21-6	0.1-1.0	GHS05-GHS07	H302-314-335

Chemical Name	CAS-No.	EINECS No.	REACH Reg No.	M-Factors
Ammonium hydroxide	1336-21-6	215-647-6	not available	0

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air. Consult a physician if symptoms persist.

FIRST AID - SKIN CONTACT: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and

launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

Section 6. Accidental release measures

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment. Ensure adequate ventilation. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically. Keep in suitable and closed containers for disposal.

Section 7. Handling and storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid dust formation.

STORAGE: Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Ammonium hydroxide	25 ppm	35 ppm		

Name	Percentage	VME mg/m3	VME ppm	OEL Nota
No hazardous items exist				

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

SKIN PROTECTION: Protective gloves

EYE PROTECTION: Safety glasses with side-shields.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance:	clear	**Physical State:**	Liquid
Odor:	Ammonia	**Odor Threshold:**	Not Established
Density, g/cm3:	0.999	**pH:**	10-12
Freeze Point, °C:	NI	**Viscosity:**	NI
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	NI
Decompostion Temp., °C:	NI		
Boiling Point, °C:	N.I.	**Explosive Limits, vol%:**	N.I.
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>94
Evaporation Rate:	Slower than Diethyl Ether	**Auto-Ignition Temp., °C:**	NI
Vapor Density:	Heavier than air	**Vapor Pressure:**	NI

(See "Other information" Section for abbreviation legend)

Section 10. Stability and reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Dust formation. Do not freeze.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

Section 11. Toxicological information

Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Sanding and grinding dust may be harmful if inhaled.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name according to EEC	Oral LD50	Dermal LD50	Gas LC50
1336-21-6	Ammonium hydroxide	350 mg/kg rat	> 2000 mg/kg	>20001 ppm

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated.

Further Ecological Information
Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name according to EEC	Bio. Conc. Factor (BCF)	Octanol-water par. Coeff (KOW)
1336-21-6	Ammonium hydroxide	not available	not available

Section 13. Disposal considerations

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not re-use empty containers.

European Waste Code: **080199 waste, not otherwise specified**

Uncleaned Packaging

European Waste Code: **150110 packaging dangerous residuals**

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Road Transport

UN Number:	not regulated
ADR/RID Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Road Tunnel Transport Code:	not regulated

Sea Transport

UN Number:	not regulated
IMDG/GGVSee Class:	not regulated
EmS-No:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Marine Pollutant:	Not A Marine Pollutant
Shipping Hazard(Marine Pollutant):	No Information

Air Transport

UN Number:	not regulated
ICAO/IATA Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information

Section 15: Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
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Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

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Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: Non-controlled

Denmark

B-Value: 0.000000

France

Storage Conditions: No Information

Professional Illness Table:

CAS Number	Chemical Name	Professional Illness
1336-21-6	Ammonium hydroxide	not available

Germany

VbF-Class: No Information

WGK-class: 1

Remarks:
WGK 0 = in general not a water pollutant
WGK 1 = weak water pollutant
WGK 2 = water pollutant
WGK 3 = severe water pollutant

Processing restrictions:*

Incident Regulation:
No Information

Spain

Storage Conditions: No Information

Switzerland

VOC-Value: 0.00

United Kingdom

Storage Conditions: No Information

Section 16. Other Information, Including date of preparation of the last revision

Revision Date: 1/10/2016 **Supercedes Date:** 1/8/2016

Reason for revision: Substance and/or Product Properties Changed in Section(s):
09 - Physical & Chemical Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Personal Protection:	X

NFPA Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Hazards:	N.I.

Volatile Organic Compounds, gr/ltr: 1,030

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS05 

GHS07 

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

ENNIS-FLINT
A Traffic Safety Solutions Company

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Certificate of Compliance

Date:	3/6/2019
Code:	985201
Description:	WB WHT FAST DRY 1952F 1 / 2
Batch:	MP1902W0041
Color:	White
Quantity:	6,050 Gallons
MFG Date:	3/4/2019

Property	UOM	Min	Max	Actual
Solids Content % Wt, Instrument Data				76.42
Pigment Content % (ash - organic pigment)	%	60	62	60.33
NVV, Non-volatile vehicle	%			40.56
Weight	lbs./gallon	--	--	14.03
Viscosity	KU	80	90	80
Directional Reflectance	%	85	--	88.35
Color Match Fed Std 595-37925		--	--	Pass
Fineness of Grind		3	--	4
Dry Opacity (5 wet mils)	Unit	0.92	--	0.961
Dry Time (No pick-up)	minutes	--	10	8
Bleeding Ratio		0.95	--	Pass
VOC	grams/liter	--	100	89.54

This product does not contain mercury, lead, hexavalent chromium, toluene, chlorinated solvents, hydrolyzable chlorine derivatives, ethylene based glycol ethers and their acetates, nor any carcinogen as defined in 29-CFR 1910.1200.

Having the authority to act for Ennis-Flint, I do hereby certify that the traffic paint data hereon complies with all applicable specifications.

Name: *Thomas Elizondo*

Title: Quality Manager

ENNIS-FLINT
A Traffic Safety Solutions Company

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Certificate of Compliance

Date:	3/6/2019
Code:	985201
Description:	WB WHT FAST DRY 1952F 1 / 2
Batch:	MP1902W0041
Color:	White
Quantity:	6,050 Gallons
MFG Date:	3/4/2019

Property	UOM	Min	Max	Actual
Physical Characteristics				
Condition in Container				Homogenous
Appearance				Smooth
Storage Stability		No Caking or Settling		Pass
Lead (Pb) Content		None/Lead-free		Pass
Chromium (Cr) Content		None/Chrome-free		Pass
Freeze-Thaw Stability	KU	-5	+5	Pass
Heat Stability	KU	-10	+10	Pass
Skinning				Pass
Accelerated Package Stability	days	14		Pass
Flexibility		180°/13 min mandrel		Pass
Abrasion Resistance				Pass
Accelerated Weathering				Pass
Abrasion Resistance				Pass
Baked Films	liters	150		Pass
Weathered Films	grams	150		Pass
Titanium Dioxide Content	g/L	120		Pass
Scrub Test				Pass
Paint Characteristics				

Manufactured by:
Ennis-Flint
10658 W. State Hwy. 294
Palestine, TX 75801
Phone: (903) 538-2271
Fax: (903) 538-2276

Corporate Office:
Ennis-Flint
4161 Piedmont Parkway
Suite 370
Greensboro, NC 27410
Phone: (800) 331-8118
Fax: (336) 475-7900

Certificate of Compliance - Glass Beads

The material covered by this Certification has been tested according to the standard procedures of Ennis-Flint Quality Control Department and complies with all applicable specifications.

Material Identification **Quantity**

Type: TTB 1325 Type I Gradation A **lbs:** 43,200
Lot: PL0219S0125

	TTB or FAA Type IA	
Micron	Sieve#	%Pass
850	20	100
600	30	80-100
300	50	18-35
150	100	0-10
75	200	0-2
Rounds: 80% overall		
Dual Coated		
EF Code: 651601		

Statement of Compliance:

I certify that the above listed item(s) meet the requirements as stated in the Material Identification section above. I hereby further certify that these beads are made using North American recycled soda lime glass cullet and meet the heavy metal specification set forth in Section 1504 of MAP-21.

Signature: *Alejandra Granados*
Title: Quality Assurance Lab Supervisor
Date: February 27, 2019

ENNIS-FLINT
A Traffic Safety Solutions Company

Certificate Of Analysis

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Date:	4/9/2019
Code:	985222 TTP-1952-E Type III
Description:	WB YEL HI BUILD 1952F3 98PA30
Batch:	MP1904Y0131
Color:	YELLOW
Quantity:	1,490 Gallons
MFG Date:	4/9/2019

Property	UOM	Method	Min	Max	Actual
Total Solids	%	ASTM D2369			78.05
Pigment	%	ASTM D3723	60	62	60.28
Non-Volatile Vehicle	%				44.74
Weight	lbs./gallon	ASTM D1475			13.98
Viscosity	KU	ASTM D562	80	90	85
Fitness of dispersion, Hegman	Unit	ASTM D1210	3		4
Directional Reflectance (Y)	Unit	ASTM E97	50		53.52
Contrast Ratio @ 5 Wet Mils	Unit	ASTM D2805	0.92		0.929
Color Matches Fed Std. 33538	CIE				Pass
Dry Time (No-Pick-Up)	Minutes	ASTM D711		10	8
Bleeding Ratio	Units	ASTM D868	0.95		Pass
V.O.C. Less Than	grams/liter	ASTM D3960		100	Pass

I do hereby that the Ennis-Flint Traffic Paint accompanying this certificate complies with TTP-1952E Type III.

This product **does not** contain mercury, lead, hexavalent chromium, toluene, chlorinated solvents, hydrolyzable chlorine derivatives, ethylene based glycol ethers and their acetates, nor any carcinogen as defined in 29-CFR 1910.1200.

Name: *Thomas Elizondo*

Title: Quality Manager

2019

Spill Prevention, Control and Countermeasure (SPCC) Plan

City of Great Falls

Public Works Department

1005 25th Ave. NE, Great Falls, MT 59404

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN

City of Great Falls
Public Works Department
1005 25th Ave. NE
Great Falls, Cascade County, MT 59404

July 2019

Prepared By:
NCI Engineering Co.
Great Falls, MT 59405
Phone: (406)453-5478
www.nciengineering.com

Table of Contents

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EXECUTIVE SUMMARY

Introduction - Conformance with SPCC Requirements 40 CFR 112.7(a)(1)

City of Great Falls Public Works Complex, Great Falls, MT in accordance with the guidelines established by the Environmental Protection Agency regulations on Discharge of Oil (40 CFR Part 110) and Oil Pollution Prevention (40 CFR 112), has prepared this Spill Prevention, Control and Countermeasure (SPCC) Plan for the Public Works Complex which includes two (2) addresses with Administration Building at 1005 25th Ave. NE, Great Falls, Cascade County, Montana; and Engineering/Operations Building address of 1025 25th Ave. NE, Great Falls, Cascade County, Montana 59404. Through this SPCC plan, this facility conforms to the specific guidelines established in 40 CFR 112.7. A copy of these regulations is included with this plan. The facility currently has one (1) above-ground double wall fuel storage tank, and numerous oil products located in the shop buildings at the time of this writing.

This plan outlines procedures to prevent the discharge of oil into the environment, especially surface water. Such discharge is prohibited by law if it affects water quality, causes a film, sheen or discoloration of the water surface or upon water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. Further, this plan creates mechanisms for response to discharges.

Facility Description

This SPCC plan was developed for the City of Great Falls Public Works Complex facility located at 1005 25th Ave. NE and 1025 25th Ave. NE, Great Falls, Montana. City of Great Falls Public Works Complex is a municipal public works complex with office buildings, shops, equipment storage buildings, City vehicles, equipment and stored road materials.

Applicability

Federal regulations require owners or operators of non-transportation-related bulk petroleum storage facilities, having an aggregate aboveground storage capacity greater than 1,320 gallons or buried storage capacity greater than 42,000 gallons to prepare and maintain site specific SPCC Plan for their facility.

SPCC regulations outlined under 40 CFR Part 112 apply to non-transportation related facilities with certain physical characteristics and oil-storage volumes. A non-transportation related facility is subject to SPCC regulations if:

- the total aboveground storage capacity exceeds 1,320 gallons, and
- due to its location, the facility could reasonably be expected to discharge oil, either directly or indirectly into or upon the navigable waters of the United States. The term navigable waters includes all waters currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce . . . as well as waters which are or could be used by interstate or foreign travelers for recreation or other purposes; or from which fish are or could be taken and sold in interstate or foreign commerce. If the release of product could reach a sewer line, drainage ditch,

intermittent stream bed (or the like) that discharges into navigable waters, either directly or indirectly, then the facility is subject to 40 CFR Part 112.

The City of Great Falls Public Works Complex facility is considered a non-transportation related facility. Its aboveground storage capacity exceeds 1,320 gallons. In the event of a major fuel release, discharges from the facility have a potential for reaching drainages which eventually flow to the Missouri River. Therefore, the subject City of Great Falls Public Works Complex is subject to the SPCC regulations of 40 CFR Part 112.

Spill History

The subject facility has not experienced any oil spill events exceeding 1,000 gallons and no two discharges within any twelve month period in the three years prior to the effective date of the SPCC plan.

Spill Prediction

If experience indicates a reasonable potential for equipment failure, include a prediction of the direction, rate of flow, and total quantity of product which could be discharged from the facility resulting from a major failure. Examples of such failure include tank failure due to overflow, rupture or leakage; pipeline failure due to rupture or corrosion; leaking flanges, gaskets, expansion joints, valves, or catch pans; spills from bulk oil loading or unloading operations; and leaks due to other causes, such as failure of wastewater or stormwater treatment or disposal systems. Use of topographic maps is recommended.

Figures prepared for this facility depict the site and drainage characteristics for the facility. The figure shows the location of all storage. Arrows show the anticipated surface drainage directions. Facility storage information is included with the site maps indicating product, container, volume and location.

Plan Review

This SPCC plan must be reviewed at least every five (5) years and amended whenever there is a change in facility design, construction, operation or maintenance which materially affects (increases or decreases) the facilities potential to discharge into or upon navigable waters.

The City of Great Falls Public Works Department - Environmental Division will review the SPCC plan at a minimum of every five (5) years and amended if any changes in the facility (amend within 6 months) and the operation of the facility affect the potential for a release.

Contingency Plans

Appropriate containment and/or diversionary structures to prevent discharged product from reaching a navigable stream should be provided (e.g. dikes, berms, retaining walls, curbing, culverts, gutters, drainage systems, retention basins, sorbent materials). If such measures listed above are deemed impractical, the following should be provided: a strong *oil spill contingency plan* following the provision of 40 CFR, Part 109 and a written commitment of manpower equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.

The facility utilizes secondary containment, a double-walled steel tank for their fuel station and a double-walled tank for waste oil to prevent discharged product from reaching navigable waters. Other oil and liquid products are stored within buildings with accessible spill kits and floor dry.

Other non-oil products are listed in this plan; these products are included to allow for a comprehensive list of products on-site for personnel training and preparedness. Three (3) 3500 gallon Magnesium Chloride tanks are located on-site and are not subject to the SPCC rules and do not provide active secondary containment. These tanks, in the event of a spill, flow to on-site storm drainage pond as a secondary containment measure. The tanks are full one month during the summer and are empty the rest of the year.

The precautionary measures taken at this facility are deemed appropriate for this location. An *oil spill contingency plan* is therefore not viewed as a necessity for this site.

SECTION 1 - PLAN CERTIFICATION

A. FACILITY APPROVAL 40 CFR 112.7

The City of Great Falls Public Works Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains high standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan for its Public Works Complex at the following addresses:

- 1005 25th Ave NE, Great Falls, Montana 59404
- 1025 25th Ave NE, Great Falls, Montana 59404

This SPCC Plan addresses the accidental discharge of oil, which could adversely impact the environment. It describes control measures to be taken to prevent spills and the countermeasures to be taken in the event of a spill or release.

Facility Name:	City of Great Falls Public Works Complex
Facility Address:	1005 25th Ave NE, Great Falls, Cascade County, MT 59404
	1025 25th Ave NE, Great Falls, Cascade County, MT 59404
Facility Type:	Municipal Public Works Complex

As the Owner's Representative of City of Great Falls Public Works Department - Environmental Division, I am responsible for the operation of this facility, I certify that the following SPCC Plan has my approval, that the resources necessary to carry out this plan have been and will continue to be made available, and that I have the authority to make this certification.

Authorized Facility Representative:

Signature: _____

Title: _____

Date: _____

B. ENGINEER CERTIFICATION 40 CFR 112.3 (d)

All state requirements and requirements for onshore facilities are met by this Plan. By means of this certification I attest that I am familiar with the requirements of 40 CFR Part 112.3; that myself or my agent has visited and examined the facility; that this Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR part 112.3; that procedures for required inspections and testing have been established; that this Plan is adequate for the facility.

This certification is based only on the information available to the engineer from the owner of the facility.

This certification shall in no way relieve the owner or operator of the facility of his duty to prepare and fully implement this plan in accordance with the requirements of 40 CFR 112.3.

The engineer provided minimum calculations required to meet 40 CFR 112.3 and does not necessarily provide spacing to meet all applicable fire code and OSHA requirements.

Date: _____

Project Engineer Signature: _____

Project Manager Signature: _____

Registration Number: _____

SECTION 2 - FACILITY INFORMATION
40 CFR 112.7 (a)(3)

Facility Owner, Address and Telephone:

City of Great Falls Public Works Complex
1005 25th Ave. NE
1025 25th Ave. NE
Great Falls, Cascade County, MT 59404
406-727-8390

Facility Contact(s):

Facility Owner/Operator(s) Information:

Name: City of Great Falls Public Works Department

Address: 1005 25th Ave. NE
1025 25th Ave. NE

City, State, Zip Code: Great Falls, MT 59404

Telephone Number: 406-727-8390

Manager Contact Information:

Name: Jim Rearden, P.E.
City of Great Falls Public Works Director

Telephone number: 406-727-8390

Facility Description

City of Great Falls Public Works Complex is a public works complex, including two addresses 1005 25th Avenue Northeast, Great Falls, Montana and 1025 25th Ave Northeast, Great Falls, Montana. The Public Works Department is one of nine departments within the City of Great Falls. The Public Works Department is located on the Public Works Complex site. The Public Works Department goal (per the City website) is to sustain a high quality of life in Great Falls through administration and management of:

- solid waste disposal and management
- water resources use and management
- sewer collection and management
- project administration and financing
- management of the roadways systems and traffic control systems
- project design, construction and management
- vehicle/equipment purchasing and equipment revolving schedule management.

The facility is located in Township 21N Range 3E and Section 36 in the North Riverview Terrace Section, Great Falls, Montana, Cascade County. The coordinates are approximately: latitude 47.529294, longitude 111.288624.

The facility consists of two (2) occupied office buildings. The lower building houses the Public Works Department, Environmental Division, and Utilities Division offices; and the Utilities Division shop and meter maintenance shop. The upper (east building) contains Engineering, Street, Solid Waste along with centralized shop services (fleet maintenance). The remaining complex outlying buildings are shops, equipment and truck storage sheds. Utilities utilize approximately two on the west property line, and solid waste/streets has approximately 3 on the east and northeast part of the site. The facility had a scale house on the north portion of the property.

The oil storage locations include the following (1) Fuel Station (1- 20,000 gallon tank), (2) Utility Shop, (3) Sewer Jet Shop, (4) Cold Storage Building, (5) Maintenance Shop Storage and (6) Street Shop. The Fuel Station includes one (1) double-walled tank. Other listed oil products are located in buildings that have spill kits and containment materials. Other products are listed in this plan, that are not oil related but these products are included to allow for a comprehensive list of products on-site for personnel training and preparedness. Bulk fuel is typically purchased from a licensed fuel contractor and hauled to the on-site tanks. The following table provides the product information.

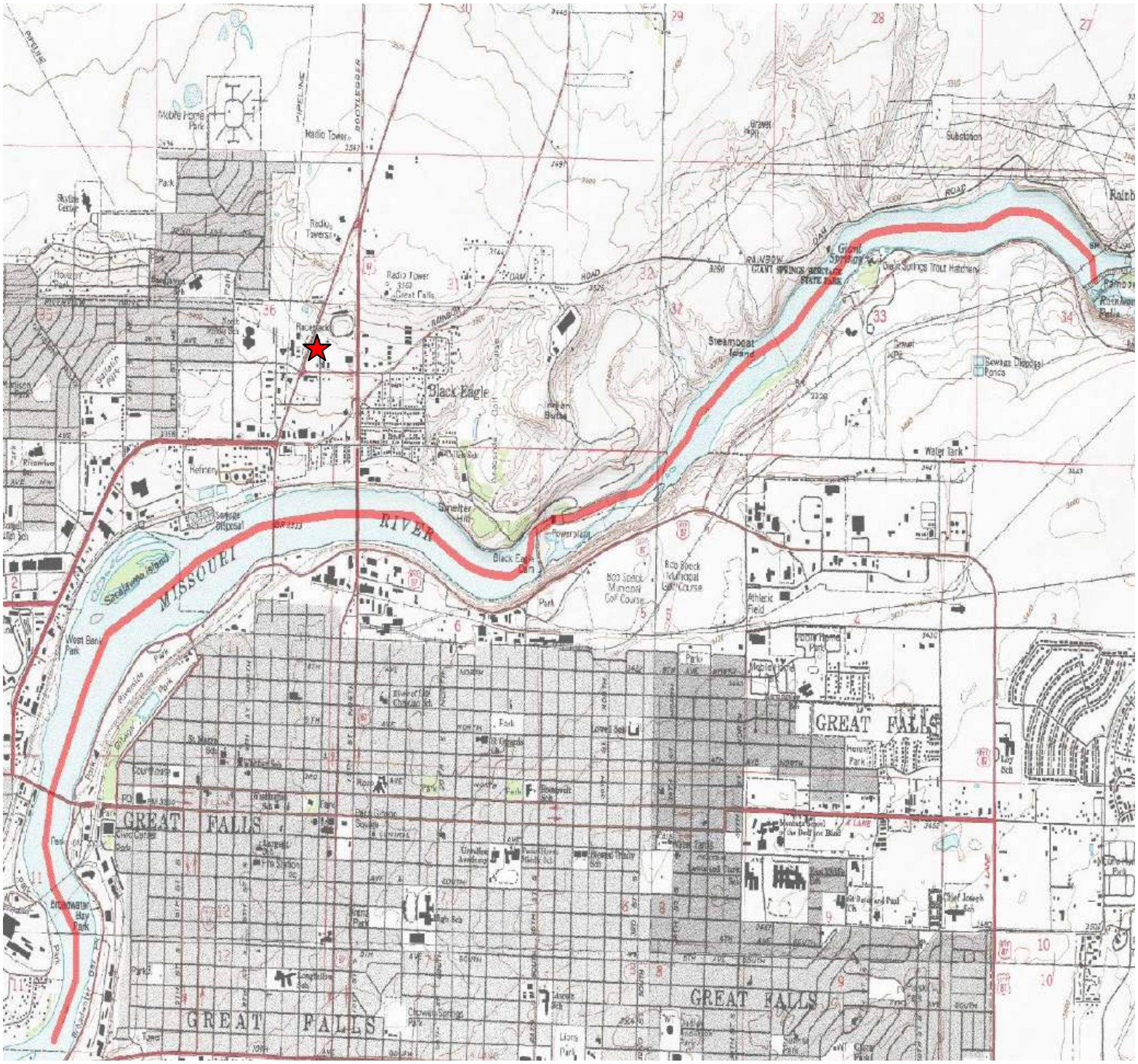
Location	**Container Type**	**Volume (gallons)**	**Oil and/or Product Type**
Fuel Station - Public Works Complex	Aboveground Double Wall Tank	1- 20,000 gallons	Diesel & Gasoline
Utility Shop	55 Gallon Drum	1-55 gallon drum	SAE 15W-40
	55 Gallon Drum	1-55 gallon drum	Stoddard Solvent
Sewer Jet Shop	55 Gallon Drum	1-55 gallon drum	DEF (Diesel Additive)
Cold Storage Building	55 Gallon Drums	2-55 gallon drum	Kerosene
Maintenance Shop	Double Wall Tank	1-750 gallons	Waste Oil
	Plastic Tote	1-330 gallons	Def ISO 22241
	Drum	1-55 gallon	ATF
	Drum	1-55 gallon	Megaplex XDS Grease
	Tote	1-270 gallons	Hydraulic Oil AW32
	Drum	1-55 gallons	All Season Antifreeze
	Drum	1-55 gallons	Zerex HD Antifreeze
	Tote	1-270 gallons	SAE 15W-40 oil
	Tote	1-80 gallons	Wiper Fluid
	Tote	1-80 gallons	OW20 Oil
	Tote	1-80 gallons	5W30 Oil
	Drum	1-55 gallons	CAT Drive Train Oil
	Drum	1-55 gallons	Universal Tractor Oil

Location	Container Type	Volume (gallons)	Oil and/or Product Type
Street Shop	Plastic Container	1-290 gallons	Unitex Q-2 Release Agent
	Plastic Container	1-290 gallon	Citra Clean Concentrate
	Plastic Container	1-80 gallon	Hydraulic Oil
	Plastic Container	1-80 gallon	Anti-freeze
	Plastic Container	1-80 gallon	15-40 Motor Oil
	Plastic Container	1-80 gallon	Transmission Fluid
	Plastic Drum	55 gallon	Windshield Washer Fluid
	Portable Tank	2-100 gallon	Diesel Tanks
	Plastic Container	1- 110 gallon 1- 30 gallon	Unitex and Citra Clean Portable Tank
	Tote	55 gallon	Bulk Paint
Public Works Complex Yard	Plastic tanks	3 - 3500 gallon tanks	Magnesium Chloride
TOTAL VOLUME =		**34,340 gallons**	

SECTION 3 - FACILITY LAYOUT, STORAGE CAPACITY, DRAINAGE PATHWAY

A. FACILITY LAYOUT 40 CRF 112.7 (a)(3):

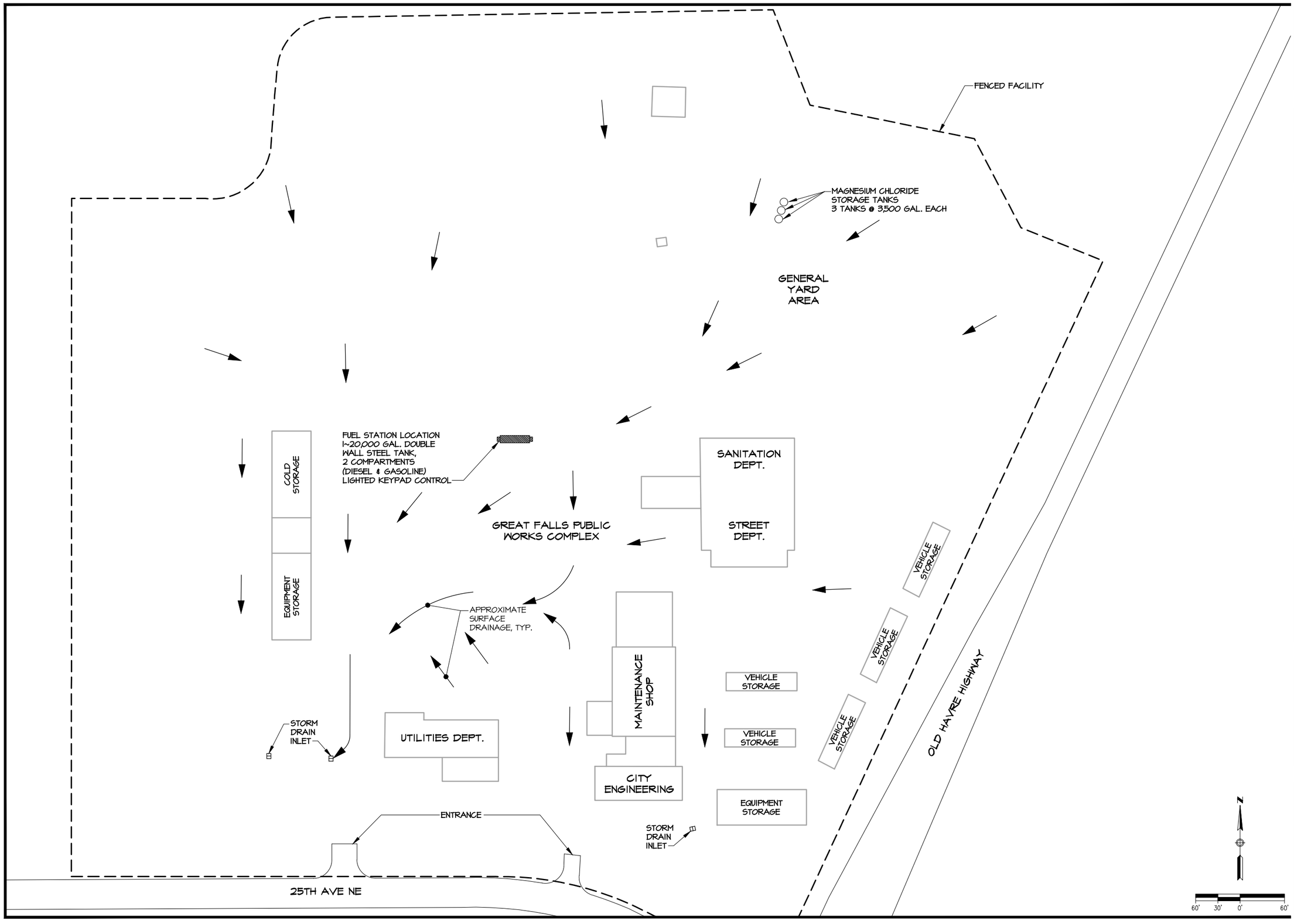
Figures



(Subject Facility denoted by red star)

FIGURE 1: VICINITY MAP

Source: USGS Quadrangle Maps
7.5 Minute Series (Topographic)
"Great Falls, Montana"



Revisions	By	Date

File No.	Job No.
FILE NO.	19A 19A-Fig2
Date	Scale
5/15/19	AS SHOWN

Professional Seal

Engineers
Environmental Specialists
Planners
Designers
Surveyors

NCI Engineering

4509 North Star Boulevard
Great Falls, MT 59405
Phone 406-453-5478

Owner

CITY OF GREAT FALLS MONTANA

O.F. #

Project Title

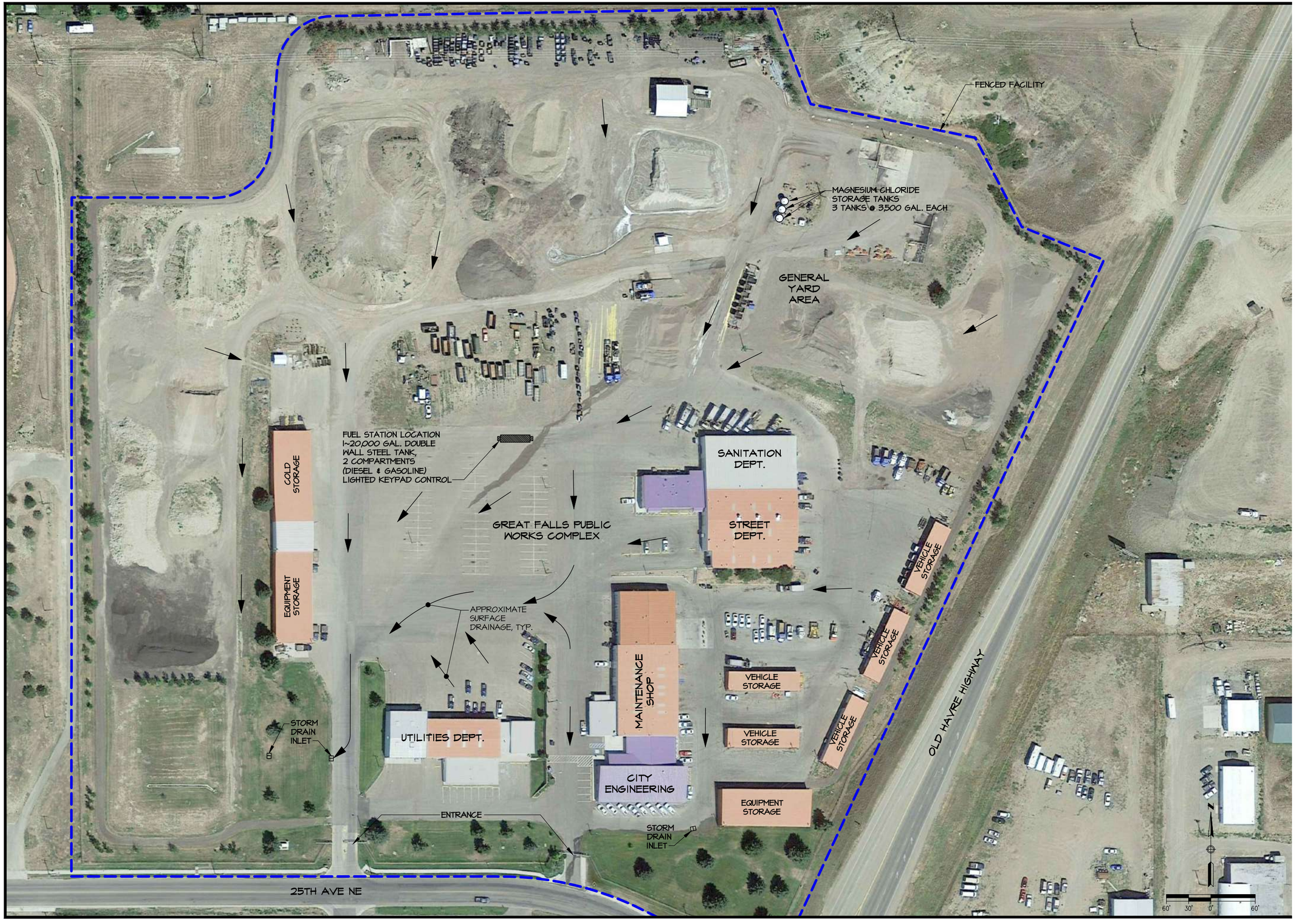
CITY OF
GREAT FALLS
PUBLIC WORKS
COMPLEX
SPCC

Sheet Title

SITE
PLAN

FIGURE 2

File # FILE #



Revisions	By	Date

File No.	Job No.
FILE NO.	19A 19A-Fig3
Date	**Scale**
5/15/19	AS SHOWN

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CITY OF GREAT FALLS MONTANA

O.F. #

Project Title

CITY OF
GREAT FALLS
PUBLIC WORKS
COMPLEX
SPCC

Sheet Title

AERIAL

FIGURE 3

File # FILE #

SECTION 3 - FACILITY LAYOUT, STORAGE CAPACITY, DRAINAGE PATHWAY (cont.)

B. FACILITY STORAGE CAPACITY 40 CFR 112.7 (a)(3)(i)

Location	Container Type	Volume (gallons)	Oil and/or Product Type
Fuel Station - Public Works Complex	Aboveground Double Wall Tank	1- 20,000 gallons	Diesel & Gasoline
Utility Shop	55 Gallon Drum	1-55 gallon drum	SAE 15W-40
	55 Gallon Drum	1-55 gallon drum	Stoddard Solvent
Sewer Jet Shop	55 Gallon Drum	1-55 gallon drum	DEF (Diesel Additive)
Cold Storage Building	55 Gallon Drums	2-55 gallon drum	Kerosene
Maintenance Shop	Double Wall Tank	1-750 gallons	Waste Oil
	Plastic Tote	1-330 gallons	Def ISO 22241
	Drum	1-55 gallon	ATF
	Drum	1-55 gallon	Megaplex XDS Grease
	Tote	1-270 gallons	Hydraulic Oil AW32
	Drum	1-55 gallons	All Season Antifreeze
	Drum	1-55 gallons	Zerex HD Antifreeze
	Tote	1-270 gallons	SAE 15W-40 oil
	Tote	1-80 gallons	Wiper Fluid
	Tote	1-80 gallons	OW20 Oil
	Tote	1-80 gallons	5W30 Oil
	Drum	1-55 gallons	CAT Drive Train Oil
	Drum	1-55 gallons	Universal Tractor Oil
Street Shop	Plastic Container	1-290 gallons	Unitex Q-2 Release Agent
	Plastic Container	1-290 gallon	Citra Clean Concentrate
	Plastic Container	1-80 gallon	Hydraulic Oil
	Plastic Container	1-80 gallon	Anti-freeze
	Plastic Container	1-80 gallon	15-40 Motor Oil
	Plastic Container	1-80 gallon	Transmission Fluid
	Plastic Drum	55 gallon	Windshield Washer Fluid
	Portable Tank	2-100 gallon	Diesel Tanks
	Plastic Container	1- 110 gallon 1- 30 gallon	Unitex and Citra Clean Portable Tank
	Tote	55 gallon	Bulk Paint
Public Works Complex Yard	Plastic tanks	3 -3500 gallon tanks	Magnesium Chloride
TOTAL VOLUME =		**34,340 gallons**	

* The City Complex has 2 – 100 gallon mobile/portable oil storage tanks exist in the Street Department (40 CFR 112.7 (e)(2)(x)

Total: 34,340 gallons

C. DRAINAGE PATHWAY AND DISTANCE TO NAVIGABLE WATERS

In the event of a major fuel release, discharges from the facility have a potential for reaching the Missouri River. The facility has one area for bulk fuel, at the Fuel Station. General drainage (flow direction) and pathways area identified on the facility map. The distance to navigable water, the Missouri River, is 7200 feet in pipe, and approximately 2650 feet in the most direct path to the river.

SECTION 4 - POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL
CFR 112.7(b)
CFR 112.7 (c)

A. Bulk Oil Storage

Bulk oil products are stored in the Fuel Station, waste oil tank or within a shop. The oil products are stored in steel tanks, plastic totes or drums. In case of rupture or leakage, the products in the secondary containment areas could not access a drainage or the environment. Traffic within the facility is limited to equipment operated by staff during normal working operations, bulk oil provider and waste product removal. Past history for this facility indicates that it is highly unlikely that there would be a release from these containers. The Fuel Station tank is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station. The following list includes oil and non-oil products.

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Fuel Station-Public Works Complex	Diesel & Gasoline	Tank Rupture/ leakage	20,000 gallons	Vary	Inside Secondary Containment	Secondary Containment
Maintenance Shop	Waste Oil	Tank Rupture/ leakage	1-750 gallon	Vary	Inside Secondary Containment	Secondary Containment
	Def ISO 22241	Tote rupture/ leakage	1-330 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	ATF	Barrel rupture/ leakage	1-55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Megaplex XDS Grease	Barrel rupture/ leakage	1-55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Hydraulic Oil AW32	Tote rupture/ leakage	1-270 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	All Season Antifreeze	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Zerex HD Antifreeze	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	SAE 15W-40 oil	Tote rupture/ leakage	1-270 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Wiper Fluid	Plastic container rupture/ leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	OW20 Oil	Plastic container rupture/ leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	5W30 Oil	Plastic container rupture / leakage	1-80 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	CAT Drive Train Oil	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Universal Tractor Oil	Barrel rupture/ leakage	1-55 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Utility Shop	SAE 15W-40	Barrel rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Sorbent Material
	Stoddard Solvent	Barrel rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Sorbent Material
Sewer Jet Shop	DEF (Diesel Additive)	Rupture/ leakage	1-55 gallon drum	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Cold Storage Building	Kerosene	Barrel Rupture/ leakage	2-55 gallon drums	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Street Shop	Unitex Q-2 Release Agent	Tote rupture/ leakage	1-290 gallons	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Citra Clean Concentrate	Tote rupture/ leakage	1-290 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Hydraulic Oil	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Anti-freeze	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	15-40 Motor Oil	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Transmission Fluid	Plastic Container rupture/ leakage	1-80 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Windshield Washer Fluid	Barrel rupture/ leakage	55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Diesel Tanks	Barrel rupture/ leakage	2-100 gallon	Vary	Inside Shop and Mobile	Shop/Spill Kit/Sorbent Material
	Unitex and Citra Clean Portable Tank	Plastic Container rupture/ leakage	1- 110 gallon 1- 30 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
	Bulk Paint	Tote rupture/ leakage	1- 55 gallon	Vary	Inside Shop	Shop/Spill Kit/Sorbent Material
Public Works Complex Yard	Magnesium Chloride	Plastic Tank rupture/ leakage	3-3500 gallon	Vary	Public works complex flow southwest	On-site storm drainage pond

B. Bulk Fuel Storage: Receiving and Dispensing

Fuel is typically purchased and delivered to the facility from a licensed fuel provider. The product is pumped from the tanker to the tanks. Fuel delivery trucks have over-fill prevention devices when the facility receives fuel. Also overfill protection devices on pumps for dispensing tanks. The Fuel Station tank is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station. The Fuel Station tank is a double wall 20,000 gallon aboveground storage tank.

Typically, not disconnecting fuel lines prior to vehicle departure, or any drain valves left open could result in a release. However, this facility Fuel Station has breakaway hoses and fuel is only accessible via key code which reduces the chances of a release. Due to signage, break away hoses, containment materials, etc. being immediately available, locking when facility is unattended and personnel training/knowledge, the potential for a release is minimized. The facility did not show any surface staining indicating that receiving and dispensing releases have been minimized in the past.

The waste oil tank is an aboveground double wall 750 gallon tank. waste oil tank is pumped often by a contractor for disposal. The maintenance building area provides good lighting and a paved surface. This location has readily accessible sorbent materials in the Maintenance shop. The potential for a release is minimized by the double wall tank, locking when the facility is unattended and personnel training/knowledge, and accessibility of sorbent materials.

Location	Product	Type of Failure	Volume	Rate	Flow Direction	Containment
Fuel Station - Public Works Complex - Main Yard	Diesel & Gasoline	Tank Rupture/ leakage	20,000 gallons	Vary	(1) Inside Secondary Containment (2) Outside containment would south westerly toward storm drainage	(1)Secondary Containment and (2)Sorbent materials, Equipment
Waste Oil Tank - Outside Maintenance Building	Waste Oil	Tank Rupture/ leakage	750 gallons	Vary	(1) Inside Secondary Containment (2) Outside containment would easterly toward storm drainage	(1)Secondary Containment and (2)Sorbent materials, Equipment

C. Field Constructed Containers CFR 112.7(i)

If a field-constructed above ground container undergoes a repair, alteration, reconstruction, or a changed in service that might affect the risk of a discharge or failure due to brittle facture or other catastrophe, evaluate the container for risk of discharge or failure to brittle fracture or other catastrophe, and as necessary take appropriate action.

No field-constructed above ground containers exist on-site, therefore this section does not currently apply.

SECTION 5 - INSPECTIONS, TESTS, AND RECORDS
CFR 112.7(e)

Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC plan for a period of three (3) years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

The facility is occupied during business hours, Monday – Friday, 8 am-9 pm. Through normal facility operations, the bulk fuel storage is viewed (visual inspection) daily, through regular use, by the employees. These visual inspections include tank integrity, valves, dispensing hoses, and pump condition.

A more formal inspection is to be completed annually for the purposes of this SPCC. The inspection form is in the Section 6 Preventative Maintenance. Inspection records are kept for three years.

Hydrostatic testing (or similar method) as required by 40 CFR 112.8(c)(6) will be performed along with visual inspections focusing on potential spill sources:

- aboveground tanks
- aboveground lines
- loading/unloading areas

40 CFR 112.8(c)(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skit-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emission testing, or another system of non-destructive shell testing. You must keep comparison records and you must inspect the container's supports and foundations. Additionally, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for the purposes of this paragraph.

A recording and inspection form is provided on the following page.

INSPECTION
& RECORDING FORM

Inspection Date: _____

Inspected By: _____

- Bulk Loading/Unloading Facilities:
  - Piping, fittings, valves, supports inspected for signs of corrosion/leakage
  - Security of area checked (lighting, locks when unattended)
  - Evidence of leakage: Yes ○ No ○
    (If yes, immediate repair is necessary. Owner will determine need for completing Spill Documentation Form)
  - Evidence of corrosion/rust: Yes ○ No ○
    (If yes, consideration should be given to maintenance/painting)

- Site Drainage:
  - Drainage pathways inspected for signs of staining and odors
  - Ensure that drainage pathways are clean with no obstructions

- Secondary Containment Structures:
  - Structural integrity inspected (no signs of crack or holes)
  - Pumps, valves, filters, and fittings checked for signs of leakage

- Aboveground Storage Tanks / Lines:
  - Evidence of leakage: Yes ○ No ○
    (If yes, immediate repair is necessary. Owner shall determine need for completing Spill Documentation Form)
  - Evidence of corrosion/rust: Yes ○ No ○ N/A ○
    (If yes, consideration should be given to maintenance)
  - Inventory record-keeping and reconciliation reviewed

- Spills and Releases:
  - Have spills or releases of petroleum product been documented during this period?
    Yes ○ No ○ (If yes, attach copy of Spill Documentation Form)

This inspection certified by _____
Owner or Owner's Representative

SECTION 6 - DISCHARGE PREVENTION MEASURES
CFR 112.7(a)(3)(ii), (iii) & (iv); and CFR 112.7(c)

Per CFR 112.7 (c), an operator must provide appropriate containment and/or diversionary structures or equipment to prevent a discharge. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from primary containment system, such as a tank or pipe, will not escape the containment system before clean-up occurs. At a minimum, an operator must use one of the following prevention systems or its equivalent:

For onshore facilities:

- Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- Curbing;
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds; or
- Sorbent materials.

The City of Great Falls Public Works Complex facility utilizes secondary containment and sorbent materials for prevention systems.

Bulk Storage Tanks - Discharge Drainage Control (Secondary Containment) - CFR 112.7(a)(3)(iii)

City of Great Falls Public Works Complex provides a double walled steel tank for fuel. The consultant viewed the Fuel Station and tank specifications for the facility. Other oil products are stored in various shops on the complex. The double walled tank meets the SPCC guidelines for secondary containment. The facility also has sorbent materials located throughout the complex.

The facility is occupied during business hours Monday – Friday 8 am – 5 pm. The facility is locked after hours and has controlled gate access after business hours. There is Closed Circuit Television being utilized 24/7. The Public Works Complex is fully fenced and all buildings and vehicles are locked after business hours. Through general working operations, the bulk fuel storage is viewed (visual inspection) by City Complex employees on a daily basis during business hours. These visual inspections include tank integrity, valves, dispensing hoses, and pump condition. A more formal inspection is to be completed annually for the purposes of this SPCC. The inspection form is included at the end of this Section 6 Preventative Maintenance. Inspection records are kept for 3 years.

Other tanks in the yard include the three (3) 3500 gallon Magnesium Chloride tanks. These tanks are not oil related but are included in this document to provide personnel with a comprehensive list of tanks for evaluation.

1. TANK INSPECTION LIST - <u>Fuel Station</u>
City of Great Falls Public Works Complex
Great Falls, Montana

<u>Bulk Fuel Storage:</u>
(1) 20,000 Gallon Aboveground Storage Tank (AST) - Double Walled Tank
2 Compartment Tank = 10,000 Gallon Diesel and 10,000 Gallon Gasoline
<u>Waste Oil Storage:</u>
(1) 750 Gallon Aboveground Storage Tank (AST) - Double Walled Tank

Date of Inspection: _____Time of Inspection: _____

Inspector:_____
Print Name Signature

Reviewing Person: _____
Print Name Signature

X=satisfactory, 0=repair/adjustment needed, C=See Comment under remarks/recommendations

	20,000 Gallon Diesel/Gasoline AST	**750 Gallon Waste Oil AST**
1. No evidence of fuel in the containment area	Not Applicable	Not Applicable
2. Tank surface checked for damage/signs of leakage		
3. Tank condition good		
4. Tank foundation intact		
5. Vents not obstructed		
6. Dispensing Pump in good condition/no signs of leakage		
7. No evidence of fuel/oil around the tank or in the immediate area		
8. Dispensing of fuel observed, acceptable practices used		
9. Spill containment kit or Sorbent Material available and fully stocked		

Note: This inspection is done annually. Completed inspection forms are kept in the SPCC Plan.

Remarks/Recommendations:

2. FUEL/OIL STORAGE INSPECTION LIST - City of Great Falls Public Works Complex Great Falls, Montana

Instructions: Review the following shops and check for the listed containers and evaluate each shop based on the table below.

1. Utility Shop: *55 gallon SAE 15W-40; 55 gallon Stoddard Solvent*
2. Sewer Jet Shop: *55 gallon DEF*
3. Street Shop: *290 gallons Unitex Q-2 Release Agent; 290 gallons Citra Clean Concentrate; 80 gallons Hydraulic Oil; 80 gallons Antifreeze; 80 gallons 15-40 Oil, 80 gallon Transmission Fluid; 2-100 Diesel Tanks; 110 gallons and 30 gallons Unitex & Clean Portable Tank, 55 gallon Bulk Paint*
4. Maintenance Shop: *330 gallon Def ISO 22241; 55 gallon ATF; 55 gallon Megaplex XDS;270 gallons Hydraulic Oil; 55 gallons All Season Antifreeze; 55 gallons Zerex HD Antifreeze; 270 gallons SAE 15W-40 Oil; 80 gallons Wiper Fluid; 80 gallons OW20 Oil; 80 gallons 5W30 Oil; 55 gallons CAT Drive Train Oil; 55 gallons Universal Tractor Oil*
5. Cold Storage Building: *2-55 gallon drums Kerosene*
6. Public Works Yard *- 3-3500 gallon Magnesium Chloride tanks*

Date of Inspection: _____Time of Inspection: _____

Inspector: _____
Print Name Signature

Reviewing Person: _____
Print Name Signature

X=satisfactory, 0=repair/adjustment needed, C=See Comment under remarks/recommendations

	1. Utility Shop	2. Sewer Jet Shop	3. Street Shop	4. Maintenance Shop	5. Cold Storage Building	6. Public Works Yard
No evidence of fuel/oil in the containment area (Building)						
Tank/container surface checked for damage/signs of leakage						
Tank condition good						
Dispensing in good condition/no signs of leakage						
No evidence of fuel/oil around the tank/container or in the immediate area						
Dispensing of fuel/oil observed, acceptable practices used						
Spill containment kit or Sorbent Material available and fully stocked						

Note: This inspection is done annually. Completed inspection forms are kept in the SPCC Plan.

Remarks/Recommendations:

SECTION 7 - SITE SECURITY CFR 112.7(g)

Fencing CFR 112.7(g)(1)
Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

Fencing is currently utilized around the facility as a security measure. The intent of the fencing is to restrict access when the facility is unattended. The facility has two access points (along 25th Ave NE) that are gated and locked when the facility is closed. The tank and other oil products are all located away from the gate areas. The facility is occupied during working hours, by staff, Monday – Friday, 8am-5pm. The site is a secure facility that is locked and tanks are only accessible via keypad entry. There is Closed Circuit Television being utilized 24/7.

Past history for this facility indicate that a release from these containers has not occurred.

Valving CFR 112.7(g)(2)
Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the containers contents to the surface have adequate security measures to that they remain in the closed position when in non-operating or non-standby status.

The drain valves are in the closed position when in non-operating or non-standby status. Access to the Fuel Station is controlled via key pad entry.

Locking *CFR 112.7(g)*(3)&(4)
Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is on a non-operating or non-standby status.

Securely cap or blanket flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining inert gas pressure.

The Fuel Station is locked and only accessible for fueling via key code control. The Fuel Station has break-away hoses, warning signs, emergency shut off, fire extinguisher, good lighting and spill kits at the station.

CFR 112.7(g)(5)
Facility lighting should be provided commensurate with the type and location of the facility that will assist in the:

- prevention of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and
- prevention of discharges occurring through acts of vandalism.

Lights are located throughout the property.

SECTION 8 - FACILITY UNLOADING AND DISPENSING CFR 112.7(h) & CFR 112.7 (a)(3)(ii)

Facility tank car and tank truck loading/unloading rack (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges use quick drainage system for tank truck loading and unloading areas.

(2)Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3)Prior to filling or departure of any tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

The City of Great Falls Public Works Complex utilizes bulk oil storage to provide fuel to City equipment and vehicles. The facility does have storage for waste oils, and other maintenance products for equipment and vehicles. The private contractor who supplies this facility with fuel meets DOT requirements for delivery personnel and equipment. Facility personnel must examine the bottom drains of vehicles prior to filling and departures (40 CFR 112.7 (e)(4)(iv)).

A warning sign is posted reminding personnel not to overfill fuel tanks. It is also recommended that all drivers utilize wheel chocks or blocks as another physical barrier during loading/unloading to ensure that the vehicle does not depart prior to disconnection of flexible transfer lines (40 CFR 112.7(h)(2)). A spill kit or sorbent materials is also recommended to be on-site for the loading/unloading area and portable tank (service truck) use. Spill kits were present during site review and appear available at each of these locations.

See also Section 4, Potential Spill Predications, Volumes, Rates and Control.

Bulk Fuel Storage: Receiving and Dispensing

Bulk fuel is typically purchased from a licensed fuel provider and delivered to the City of Great Falls Public Works Complex) to the on-site tanks. The product is pumped from the tanker to the tanks. Fuel delivery trucks have overfill prevention devices when the facility receives fuel. The tanks are essentially locked, fuel is only pumped via keypad entry.

Not disconnecting fuel lines prior to vehicle departure, or any drain valves left open could result in a release. This facility has standard breakaway hoses to prevent such releases. Also, due to containment materials being immediately available, locking when not attended and personnel training/knowledge, the potential for a release is minimized. The facility did not show any surface staining indicating that receiving and dispensing releases have been minimized in the past.

Field Constructed Containers CFR 112.7(i)

If a field-constructed above ground container undergoes a repair, alteration, reconstruction, or a changed in service that might affect the risk of a discharge or failure due to brittle facture or other catastrophe, evaluate the container for risk of discharge or failure to brittle fracture or other catastrophe, and as necessary take appropriate action.

No field-constructed above ground containers exist on-site, therefore this section does not currently apply.

Spill Control Equipment

Spill control equipment on site includes facility equipment (excavator, loader, etc), sorbent materials, empty pails, shovels and brooms. Spill kits are located throughout the Complex at the Fuel Station and in the shop buildings and is readily accessible in the event of a spill.

SECTION 9 - SPILL RESPONSE
CFR 112.7 (a)(3)(iv)

A. SPILL RESPONSE PLAN -

The purpose of the Spill Response Plan is to minimize the effects of any release into the environment. This is done by responding immediately to the release with the intent of confining it with adsorbent materials and keeping it from entering a natural drainage located on or near the property. Personnel are trained annually in the implementation of this plan.

Fuel

In the event of a release of fuel, the following steps are to be followed:

1. Stop the flow of product.
2. Apply sorbent materials.
3. Notify management (Owner's Representative, Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager).

Note: If the release appears that it will exceed the plant's ability to control it, the local Fire Department should be notified immediately, by dialing 911. Recovered waste products and oils can be transferred to Emerald Services (formerly Oily Waste Processors) for disposal (172 N. Manchester Rd., Great Falls, Montana 59404, 406-761-4503). Contaminated soil can be disposed at the landfill (2) High Plains Landfill, 142 Powerline Rd, Floweree, MT, 406-452-3143 ((40 CFR112.7 (3)(v)).

Oil/Other Products

In the event of a release of oil/other products, the following steps are to be followed:

1. Stop the flow of product.
2. Cover the floor drain, or surround floor drain with absorbent material to prevent oil from entering drain.
3. Utilize absorbent materials to prevent spills from leaving shop building(s).
4. Apply absorbent materials to spill.
5. Notify management (Owner's Representative, Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager).

B. EMERGENCY SPILL EQUIPMENT

As part of this SPCC Plan, City of Great Falls Public Works Complex is prepared to contain and recover spills on its property. They have the following equipment and materials for spill recovery:

- secondary containment around tanks
- Absorbent materials - for containment and recovery of small spills
- empty pails, shovels, brooms and other equipment to assist in the containment of a spill
- facility equipment
- stockpiled materials such as soils to contain any spill

These materials and equipment have been selected by the Owner and/or Owner's Representative as the most suitable items for responding to a spill event. They are maintained at the facility with immediate accessibility. The list of equipment and materials will continue to be upgraded with changing technologies and as the Owner identifies other areas of concern at the facility.

C. SPILL REPORTING AND EMERGENCY CONTACTS - CFR 112.7(a)(3)(vi)
Any release that reaches a drainage must be reported immediately to the following:

Paul Skubinna, Spill Response Coordinator City of Great Falls Environmental Division Manager	1-406-727-8390
National Response Center:	1-800-424-8802
MT DEQ Leak Hotline NOTE: You must report to a live person. Leaving a message does not constitute a report.	1-800-457-0568 Friday 8am-5pm 1-406-324-4777 After hours and holiday

Montana State Emergency Response Commission (SERC) Contacts

Mr. Bob Habeck
Montana DEQ
P.O. Box 200901
Helena, MT 59620-0901
Phone: 406-444-7305
Email: bhabeck@mt.gov

Ms. Delila Bruno
Montana Disaster & Emergency Services
PO Box 4789
Fort Harrison, MT 59636-4789
Phone: 406-324-4777
Email: dbruno@mt.gov
MTDES@mt.gov

Local Emergency Response:	911
Local Fire Department:	911
Local Hospital	Benefis Emergency Room 1101 26th St S, Great Falls, MT (406) 455-5000 Great Falls Clinic Emergency Room 3010 15th Ave. S, Great Falls, MT (406) 216-8082
NCI Engineering Co.	1-406-453-5478

D. SPILL REPORTING & DOCUMENTATION - CRF 112.7(a)(4)

The facility's Owner and/or Owner's Representative is responsible for all reporting and related documentation procedures. All personnel will immediately report spill events to the Owner. The Owner will then make the determination of what action must be taken.

1. The Owner, when notified of the spill, will complete a spill documentation form included at the end of this section. The Owner will evaluate the potential impact to the drainage ditch and surface water, groundwater, private utilities, and other similar pathways.

2. Within 24 hours of the release, the Owner will notify the state DEQ - Petroleum Release Section. Monday through Friday 8am to 5 pm at 1(800)457-0568; after hours and holidays call 1 (406)324-4777.The leak must be reported to a live person, leaving a message does not constitute a report.

3. If it is concluded that the spill has the potential to reach navigable waters by way of the city storm drain system, the Owner will immediately contact the National Response Center (NRC) at (800)424-8802. The Owner will then file a copy of the spill documentation form with the U.S. Environmental Protection Agency - Water Division.

SPILL DOCUMENTATION FORM - CFR 112.7(a)(4)

1. Release product
   - ○ Diesel
   - ○ Gasoline
   - ○ Antifreeze
   - ○ Solvent
   - ○ Other _____

   Release volume
   - ○ 0-10 gallons
   - ○ 10-100 gallons
   - ○ 100-1000 gallons
   - ○ 1000 - 10,000 gallons
   - ○ > 10,000 gallons

   Did release reach drainage?
   - ○ yes ○ no

   If so, was release harmful quantity?
   - ○ yes ○ no

2. Facility Name & Location:

3. Date of Release: _____ Time: _____ ○ A.M ○ P.M.

4. Receiving Watercourse or Structure:

5. Structure or Vessel Releasing Product:

6. Description of Physical Damages or Injuries:

7. Cause of Release:

8. Actions being used to stop, remove, mitigate the effects of the release:

9. Volume of Product Recovered: _____ Gallons

10. Evacuation Needed ○ YES ○ NO

11. Cost of Damages
    - ○ $0 - $100
    - ○ $100 - $1,000
    - ○ $1,000 - $10,000
    - ○ > $10,000

12. Action Taken to Prevent Recurrence:

13. Contacts/Agencies Notified:

Spill Reported by _____

Documented by _____
Owner or Owner's Representative

SECTION 10 - PERSONNEL, TRAINING, AND DISCHARGE PREVENTION CFR 112.7 (f)

General

At a minimum, train oil handling personnel in the operation and maintenances of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules and regulations; general facility operations; and the contents of this facility's SPCC plan.

The facility should designate at least one person who is accountable for discharge prevention and who reports to facility management.

Schedule and conduct discharge prevention briefings for oil handling personnel at least once a year to assure adequate understanding of the SPCC plan. The briefings should also address and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

Personnel Training and Spill Prevention Procedures

This SPCC Plan and/or procedures should be reviewed with any new personnel so that new personnel are shown the spill response materials and how to respond to a release.

Yearly, all affected personnel should be given refresher training.

Anyone who is required to fuel vehicles should receive specific training in how to prevent spills during the fueling operation, and how to respond if there is release. A copy of this training is part of this SPCC.

Copies of the training guideline and yearly tests are included in this Training Section of the SPCC.

The designated person who are accountable for spill prevention are: Paul Skubinna, Spill Response Coordinator, City of Great Falls Environmental Division Manager, Owner's Representative.

Annual Training/Review

All new personnel will be trained in spill prevention and response which includes a review of the SPCC Plan. Annually, all affected personnel receive a review of how to prevent spills and how to respond. This training covers the procedures listed in the Spill Response Section. Any affected employee is required to take a test on the covered material.

Personnel who are assigned to dispense fuel receive training in the requirements for fueling operations. This training includes:

1. Stop engine.
2. Inspect dispensing hose and pump for leaks.
3. Dispense fuel. DO NOT OVERFILL TANK!!
4. Remain within arm's length of the filling hose.
5. Close valve when fueling is complete.
6. Lock tanks when facility is not attended.

The facility Owner and/or Owner's Representative is responsible for conduction this training and maintaining written records of such training, if the facility has any personnel that will assist in fueling operations.

SPILL PREVENTION, CONTROL AND COUNTERMEASURE
Annual Training/Review

Name:

_____

Print Signature

Date:

_____

Person Conducting Training:

_____

T or F City of Great Falls Public Works Complex has the capacity to store more than 1,320 gallons of oil products.

T or F City of Great Falls Public Works Complex is required to have an SPCC plan in place.

T or F SPCC is an acronym for Spill Prevention, Control and Countermeasure.

T or F Never call 911 when responding to a spill.

T or F If an oil spill occurs the facility SPCC plan has local, state and federal contact numbers listed.

How many stationary bulk fuel tanks are located on City of Great Falls Public Works Complex. property?_____

How many mobile fuel tanks does the City of Great Falls Public Works Complex. operate?_____

Has the facility bulk fuel or petroleum system changed where a SPCC revision is required?_____

Where are spill kits/sorbent materials located for this facility?_____

SECTION 11 – SPILL HISTORY

The subject facility is not known to have experienced any oil spill events exceeding 1,000 gallons and no two discharges within any twelve month period in the three years prior to the effective date of the SPCC plan.

Appendix A

Facility Photographs

Fuel Station & Dispensers, View Facing West

Street/Sanitation, Maintenance Shop

Fuel station, View Facing North

Parking Area, Looking North

Maintenance Shop, Street/Sanitation

Street & Sanitation

Fuel Station

Fuel Station Spill Kit

Fuel Station

Fuel Station

Equipment Storage, Looking West

Dispenser at Fuel Station

Fuel Station Tank, Bollards, and Lights Looking West

Parking Area & Equipment S Storage Buildings

Fuel Station Dispensing

Parking, Water Dept. Looking South

Lighting at Fuel Station

Equipment Storage Bldgs.

Parking Area Looking SE, Toward Water Dept. and Maintenance

Parking Lot

Parking & Equipment Storage

Storm Drainage to Storm Inlet

Parking & Utilities

Exit of Public Works

Engineering Bldg. & Maintenance Shop

Entrance to Public Works Complex

Public Works Complex Operations & Engineering Office

Appendix B

40 CFR 112.7 Cross Reference Matrix

40 CFR 112.7 Cross-Reference Matrix	
40 CFR 112.7 Section	**Location in SPCC Plan**
112.7 (a)(1) Conformance with Requirements	Executive Summary, Pg i
112.7 (a) (2) Deviations	N/A
112.7 (a)(3) Facility Diagram	Pg 8, Section 3
112.7 (a)(3)(i) Type of Oil in Each Container	Pg 10, Section 3 - B. Facility Storage Capacity
112.7 (a) (3)(ii) Discharge Prevention Measures	Pg 17, Section 6 Discharge Prevention Measures & Pg 21, Section 8 Facility Unloading and Dispensing
112.7 (a) (3)(iii) Discharge Drainage Control	Pg 17, Section 6 Discharge Prevention Measures & Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(iv) Other Drainage Control	Pg 17, Section 6 Discharge Prevention Measures & Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(v) Methods of Disposal	Pg 23, Section 9 Spill Prevention
112.7 (a) (3)(vi) Contact List & Phone Numbers	Pg 25, Spill Reporting and Emergency Contacts
112.7(a) (4) Information and Procedures Reporting Spills	Pg 26, D. Spill Reporting and Documentation
112.7 (b) Equipment Failure	Pg 12, Section 4 Spill Predictions
112.7 (c) Discharge Prevention	Pg 12, Section 4 Spill Control
112.7 (d) Equivalent Environmental Protection	N/A
112.7 (e) Inspections and Tests	Pg 15, Section 5 Inspections, Tests and Records
112.7 (f) Training	Pg 28, Section 10 Personnel Training and Discharge Prevention
112.7 (g) Security	Pg 20, Section 7 Site Security
112.7 (h) Facility tank car/tank truck loading/unloading	Pg 21, Section 8 Facility Unloading and Dispensing
112.7 (i) Field Construction Containers	Pg 14, No field construction containers

Appendix C

SPCC Plan 5 Year Review Page

SPILL PREVENTION CONTROL AND COUNTERMEASURE
COMPLIANCE INSPECTION PLAN
CFR 112.5

REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, City of Great Falls Public Works Complex will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan will be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil or diesel fuel into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates Signature

1. _____

2. _____

3. _____

4. _____

5. _____

Appendix D

40 CFR 112.7 Regulations

§112.7(a)(2). For each determination of impracticability of secondary containment pursuant to §112.7(d), the Plan must clearly explain why secondary containment measures are not practicable at this facility and provide the alternative measures required in §112.7(d) in lieu of secondary containment. By certifying each measure allowed under §112.7(a)(2) and (d), the Professional Engineer attests:

(A) That he is familiar with the requirements of this part;

(B) That he or his agent has visited and examined the facility; and

(C) That the alternative method of environmental equivalence in accordance with §112.7(a)(2) or the determination of impracticability and alternative measures in accordance with §112.7(d) is consistent with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part.

(ii) As described in paragraph (b)(3) of this section, the facility owner or operator may not self-certify measures as described in §112.9(c)(6) for produced water containers and any associated piping. Such measures must be reviewed and certified, in writing, by a licensed Professional Engineer, in accordance with §112.3(d)(1)(vi).

(iii) The review and certification by the Professional Engineer under this paragraph is limited to the alternative method which achieves equivalent environmental protection pursuant to §112.7(a)(2); to the impracticability determination and measures in lieu of secondary containment pursuant to §112.7(d); or the measures pursuant to §112.9(c)(6) for produced water containers and any associated piping and appurtenances downstream from the container.

[73 FR 74302, Dec. 5, 2008, as amended at 74 FR 58810, Nov. 13, 2009]

§112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Except as provided in §112.6, your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your

Plan, following the procedures in §112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under §112.1(d)(11). You must also address in your Plan:

(i) The type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in §112.1(b).

(4) Unless you have submitted a response plan under §112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in §112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in §112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under §112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in §112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either

active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing or drip pans;

(iii) Sumps and collection systems;

(iv) Culverting, gutters, or other drainage systems;

(v) Weirs, booms, or other barriers;

(vi) Spill diversion ponds;

(vii) Retention ponds; or

(viii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) Provided your Plan is certified by a licensed Professional Engineer under §112.3(d), or, in the case of a qualified facility that meets the criteria in §112.3(g), the relevant sections of your Plan are certified by a licensed Professional Engineer under §112.6(d), if you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11) to prevent a discharge as described in §112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under §112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

(e) *Inspections, tests, and records.* Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(f) *Personnel, training, and discharge prevention procedures.* (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) *Security (excluding oil production facilities).* Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.

(h) *Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).*

(1) Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks or vehicle

brake interlock system in the area adjacent to a loading/unloading rack, to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

(k) *Qualified Oil-filled Operational Equipment.* The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this subsection may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this sub-section in lieu of general secondary containment required in paragraph (c) of this section.

(1) *Qualification Criteria—Reportable Discharge History:* The owner or operator of a facility that has had no single discharge as described in §112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in §112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war or terrorism); and

(2) *Alternative Requirements to General Secondary Containment.* If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must:

(i) Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and

(ii) Unless you have submitted a response plan under §112.20, provide in your Plan the following:

(A) An oil spill contingency plan following the provisions of part 109 of this chapter.

(B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

[67 FR 47140, July 17, 2002, as amended at 71 FR 77292, Dec. 26, 2006; 73 FR 74303, Dec. 5, 2008; 74 FR 58810, Nov. 13, 2009]

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

SOURCE: 67 FR 47146, July 17, 2002, unless otherwise noted.

§112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) *Facility drainage.* (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the

Appendix E

Documentation of Oil Products

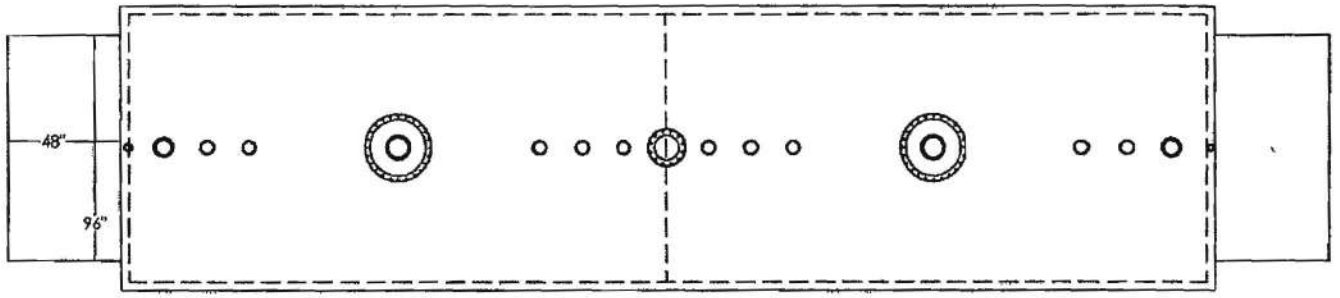
MATERIAL AND CONSTRUCTION CONFORM TO UNDERWRITERS LABORATORIES STANDARD U.L. 2085. SECONDARY CONTAINMENT PROTECTED ABOVEGROUND TANK.

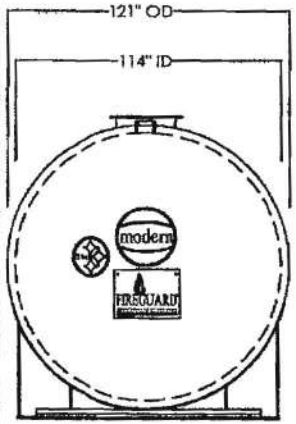
FIRE RESISTANT PER U.L. 2085

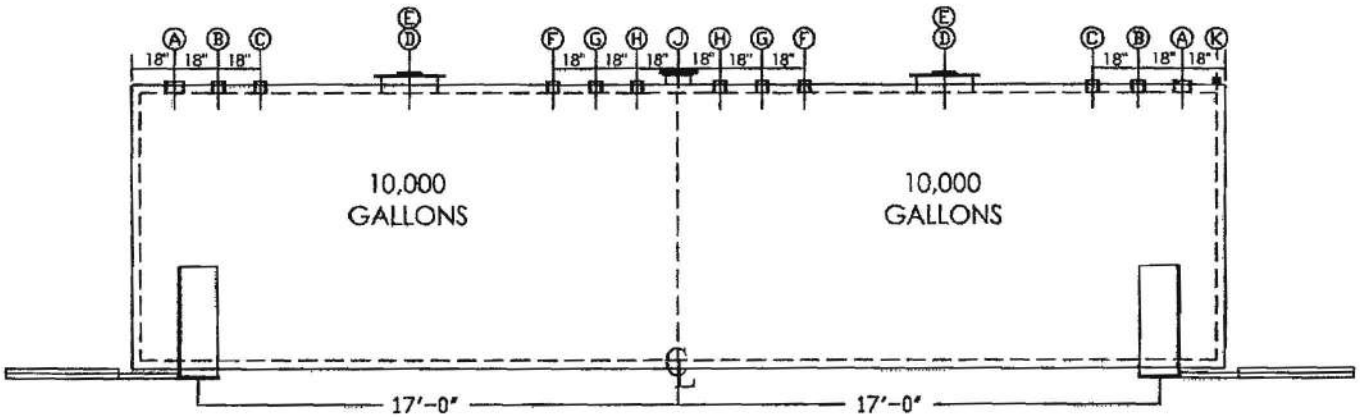
BULLISTIC RESISTANT PER U.L. 2085

IMPACT RESISTANT PER U.L. 2085

U.L. LABEL FOR PROTECTED SECONDARY CONTAINMENT ABOVEGROUND TANK IS REQUIRED. CARB EXECUTIVE ORDER VR-302-C.







MEETS 2013 CBC
MEETS 2012 IBC

INNER TANK: PER U.L.
OUTER TANK: PER U.L.

INTERIOR: BARE, CLEAN OF DEBRIS
EXTERIOR: WHITE POLYURETHANE

AIR TEST AT NOT LESS THAN 3 PSI NOR MORE THAN 5 PSI. PRIMARY TANK TO BE TESTED ALONE. SECONDARY TANK TO BE PRESSURE TESTED WITH PRESSURE IN PRIMARY TANK. THIS SHALL BE ACCOMPLISHED BY BLEEDING AIR FROM THE PRIMARY TANK INTO THE SECONDARY TANK.

AT NO TIME SHALL THE PRESSURE IN THE SECONDARY TANK EXCEED THE PRESSURE IN THE PRIMARY TANK.

SIZE	O.D.	LENGTH	WEIGHT
20,000	121"	38'-9"	50,000#

MARK	QTY.	SIZE	TYPE	REMARKS
A	2	6"	FNPT	FILL
B	2	4"	FNPT	
C	2	4"	FNPT	
D	2	24"		MANWAY
E	2	8"	FNPT	PRI. E-VENT
F	1	8"	FNPT	SEC. E-VENT
G	2	4"	FNPT	
H	2	4"	FNPT	
J	2	4"	FNPT	
K	1	2"	MNPT	MONITOR

SCHEDULE OF OPENINGS

NO. REQD.: ONE (1) ITEM NO.: FG20000

modern welding company of california, inc.
4141 N. BRAWLEY AVE. FRESNO, CA 93722
PH. 559-275-9353 FAX 559-275-4381

NORTHWEST FUEL SYSTEMS
20,000 GALLON U.L. 2085 FIREGUARD TANK

DWN. BY	JC	DATE 6/23/17	SCALE: NONE
CHK. BY		JOB NO.	DWG. NO. 14340
APP. BY		P.O. NO.	SHT. NO. 1 OF 1

Underwriters Laboratories Inc.®

Northbrook, Illinois • (847) 272–8800
Melville, New York • (516) 271–6200
Santa Clara, California • (408) 985–2400
Research Triangle Park,
North Carolina • (919) 549–1400
Camas, Washington • (360) 817–5500

CERTIFICATE OF COMPLIANCE

CERTIFICATE NUMBER: 090198 - MH17883
ISSUE DATE: September 1, 1998

Issued to: Steel Tank Institute
570 Oakwood Road
Lake Zurich, IL 60047

Report Reference: MH17883

This is to Certify that representative samples of: Protected Aboveground Tanks for Flammable and Combustible Liquids, with 3" and 6" Insulation

Have been investigated by Underwriters Laboratories Inc. in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL2085, Protected Aboveground Tanks for Flammable and Combustible Liquids

Additional Information: "Fireguard" protected secondary containment aboveground tanks for Flammable and Combustible Liquids. These are secondary containment aboveground steel tanks with a layer of insulating material in the annular space. These tanks have been proven to meet the requirements outlined in UL 2085 including: Two Hour Full Scale Fire Test, Ballistics/Projectile Test, Vehicle Impact Test, Hose Stream Test, Pool Fire Test and Interstitial Communication Test. These tanks are intended for stationary installation in accordance with the Flammable and Combustible Liquids code, NFPA 30, the Automotive and Marine Service Station Code, NFPA 30A, and the Standard for Installation of Oil Burning Equipment, NFPA 31 for the National Fire Protection Association, and/or the Uniform Fire Code.

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes four elements as follows: the name "Underwriters Laboratories Inc." in various forms and type styles, or abbreviations such as "Und. Lab. Inc.", or the symbol "UL in a circle" - (UL) ; the word " Listed"; a control number (may be alphanumeric) assigned by UL; and the product or category name (product identifier), as indicated in the appropriate UL Directory.

LOOK FOR THE UL LISTING MARK ON THE PRODUCT

Engineer: LISA DEVERA
Underwriters Laboratories Inc.

Review Engineer: WAYNE DOVERSBERGER
Underwriters Laboratories Inc.

Modern Welding Company, Inc.

Visit our Website: www.modweldco.com "Request A Quote"

Subsidiaries Nationwide

LONG FORM: Section 13205
Guide Specification
Modern Welding Company, Inc.
Modern "Fireguard" "Insulated Secondary Containment Rectanglar Aboveground Tank for Flammable Liquids, Protected Type."

PART I General

1.01 Related Work Specified in Other Sections

A. Cast-In-Place Concrete: Section 03300
B. Anchor Bolts: Section 05501
C. Liquid Level Gauges: Section 15174
D. Piping: Section 15064
E. Painting: Section 09900

1.02 Quality Assurance

A. Acceptable Manufacturer: Modern Welding Company, Inc.

B. Governing Standards:

1. U.L. 142, Underwriters Laboratories, Inc., Steel Aboveground Tanks for Flammable and Combustible Liquids.
2. U.L. 2085, Underwriters Laboratories 2 Hour Fire Rating's Standard for Insulated Aboveground Storage Tanks for Flammable and Combustible Liquids.
3. NFPA 30, National Fire Protection Association Flammable and Combustible Code.
4. NFPA 30A, National Fire Protection Association Automotive and Marine Service Station Code.
5. Uniform Fire Code International Fire Code Institute.
6. B.O.C.A. National Fire Prevention Code.
7. NFPA 31, Standard for Installation of Oil Burning Equipment.

1.03 Submittals

A. Shop Drawings: Contractor shall submit _____ copies of shop drawings for each tank, location of fittings, and accessories with specific dimensions shall be shown on all drawings.
B. Drawing Approval: Contractor shall receive drawing approval prior to product fabrication.
C. Catalog Data: Contractor shall submit _____ current copies of manufacturer's literature.
D. Certification: Each tank shall bear the U.L. 2085 label for "Insulated Secondary Containment Aboveground Tank for Flammable Liquids."

PART II Products

2.01 Modern Quality "Fireguard" Insulated Secondary Contained Aboveground Storage Tanks

A. Materials

1. Only new material shall be used in the manufacturing process, and the

manufacturer shall ensure that the material used meets all appropriate specifications and quality assurance requirements.

B. Dimensional Requirements(Cylindrical Tanks)

1. Nominal capacity of the tank(s) shall be _____gallons.
2. Nominal inner tank diameter of the tank(s) shall be _____ inches.
3. Overall length of inner tank(s) shall be _____feet, _____ inches.
4. Minimal material thickness of the tank(s) shall be per UL-142 requirements.
5. Minimum annular space insulation thickness material to be 3".with only UL-2085 listed insulation material shall be used.

Dimensional Requirements Rectangular Tanks)

1. Nominal capacity of the tank(s) shall be _____gallons.
2. Nominal inner tank width of the tank(s) shall be _____ inches.
3. Nominal inner tank height of the tank(s) shall be _____ inches.
4. Overall length of inner tank(s) shall be _____feet, _____ inches.
5. Minimal material thickness of the tank(s) shall be per UL-142 requirements.
6. Minimum annular space insulation thickness material to be 3". Only UL-2085 listed insulation material shall be used.

C. Loading Conditions: Tanks shall meet the following design criteria.

1. Internal Load: Rectangular Tank(s) shall withstand an air pressure test of 1.5 to 2 psi, cylindrical tanks shall be able to withstand an air pressure test of 3 to 5 psi.
2. Tank(s) shall be designed to support accessory equipment such as ladders, pumps, floating suction, etc. when installed according to manufacturer's instructions and limitations.
3. Tank(s) shall be provided with suitably designed and located lifting lugs which have a 2:1 safety factor.

D. Product Storage Requirements

1. Tank(s) shall be capable of storing liquids with a specific gravity up to 1.0.
2. Tank(s) is designed for operation at atmo spheric pressure only. Both inner and outer tanks shall have openings of sufficient size to meet normal and emergency venting requirements stated in U.L. 142, UFC and NFPA.
3. Tank(s) shall be capable of storing gasoline, gasohol, jet fuel, avgas, diesel fuel, methanol or fuel oil at ambient temperatures.

2.02 Accessories

A. Certification Plate: Underwriters Laboratories label "Insulated Secondary Containment Aboveground Tank for Flammable Liquids." shall be affixed to each tank.

B. Fittings: Threaded/NPT

1. All threaded fittings shall be of a material of construction consistent with the requirements of the Underwriters Laboratories. All fittings shall be protected using threaded plugs or suitable closure caps.
2. Fittings Schedule:

Use	Size	Type
____	____	____
____	____	____
____	____	____

3. Location: Refer to drawings.

C. Fittings: Flanged Nozzles

1. All flanged nozzles shall be of a material of construction consistent with the

Modern Welding Company of Florida, Inc.
Orlando FL (407) 843-1270
Modern Welding Company of Texas, Inc.
Houston, TX (713) 675-4211
Modern Welding Company of Texas, Inc.
Rhome, TX (817) 636-2215
Modern Welding Company of Iowa, Inc.
Burlington, IA (319) 754-6577
Modern Welding Company of California, Inc.
Fresno, CA (559) 275-9353
Modern Welding Company of Georgia, Inc.
Augusta, GA (706) 722-3411

Fireguard® (U.S. Pat. No. 5,695,089)
INSTALLATION, TESTING & MAINTENANCE INSTRUCTIONS

1.0 TANK SITE EVALUATION AND PREPARATION PRIOR TO INSTALLATION

1.1 The foundation must be designed to support the tank plus 100% of its contents when full. The foundation design shall also take into account the type of support that is being used and the point load associated with that support. The foundation may be constructed using concrete, asphalt, gravel or other stable material and must include provisions in its design to prevent tank movement. The foundation should include any provisions necessary for seismic design.
The foundation design must also include provision for draining surface water away from the tank.

1.2 For tank installations without cathodic corrosion protection, the tank should be grounded in accordance with applicable electrical and fire code standards.

1.3 Where the steel tank body is in contact with the earth, use a zinc grounding rod. Do not use a copper grounding rod.

1.4 Where the steel tank body is in contact with the earth or foundation, it should be protected from external corrosion. For external corrosion protection using cathodic corrosion protection, consult applicable standards (i.e., National Association of Corrosion Engineers) to provide the tank with appropriate protection from lightning without interference with the corrosion protection. Steel tanks in contact with the earth should not use copper grounding. Refer to STI R893-89, "Recommended Practice for External Corrosion Protection of Shop Fabricated Aboveground Storage Tank Floors."

1.5 Tanks located in areas subject to flooding must be protected against floatation.

1.6 Aboveground tanks should not be located above underground utilities or directly beneath overhead power lines.

1.7 The tank shall be protected from vandalism and accidental damage in accordance with all applicable codes, i.e., NFPA 30, NFPA 30A, UFC, etc. as well as local environmental regulations and safety codes. Consult local authorities before installing this tank.

2.0 TANK HANDLING

2.1 Do not handle or install the tank without having knowledge and experience in procedures involved with proper and safe installation of an aboveground tank used for storage of stable, flammable and combustible liquids.

2.2 Equipment for handling the tank shall be of adequate size to lift and position the tank. DO NOT DROP OR DRAG THE TANK.

2.3 Tanks shall be carefully handled using cables or chains of adequate length (with spreader bars, if necessary) and size. Attach to the tank using the lifting lugs provided. Care should be taken that the angle between the two cables, at the lift point, shall be no greater than 60 degrees.

2.4 DO NOT HANDLE OR MOVE THE TANK UNLESS IT IS EMPTY.

2.5 This is a stationary tank. Do not use this tank for transport of any product.

3.0 TESTING

3.1 General Requirements

3.1.1 An on-site air test of the tank may be required by local authorities to ensure no damage has occurred in shipping and handling. All testing shall be done as described below.

3.1.2 Vacuum monitored double wall tanks are shipped from the manufacturer with a vacuum drawn on the space between the walls. Read and record the vacuum pressure. If the vacuum gauge reading is less than 12 inches

Hg (40.5 kPa), contact the original tank manufacturer.

3.1.3 In lieu of the air pressure test described below, a vacuum may be applied to the interstice of a double-wall tank or to the interstice of a double-bottom tank. DO NOT APPLY A VACUUM TO THE PRIMARY TANK OF A DOUBLE-WALL TANK OR TO A SINGLE-WALL TANK. A vacuum of 7" to 10" Hg is to be applied to the interstice and held for at least 24 hours with no more than a 2" Hg vacuum loss allowed. If this vacuum cannot be held for 24 hours, then perform the air test procedure described below.

3.1.3.1 Caution must be taken in applying a vacuum to the interstice of a tank and the testing must be stopped if any deformation appears on the tank.

3.2 Air Pressure Test Procedure for Tanks

3.2.1 Remove emergency vents and cap openings to hold tank pressure as required.
NOTE: Use only calibrated air pressure gauges with a 0-15 psig (0-103 kPa) dial span. The relief valve must have a flow rate at the set pressure that is greater than the flow rate of the air supply line. The regulated air supply test pressure used for this test should be as follows:

a. **Horizontal cylindrical tanks** - Not less than 3 psig (20.7 kPa) nor more than 5 psig (34.5 kPa). Set the pressure relief valve in the test air supply line at 5.5 psi (38 kPa).

b. **Vertical tanks**-Not less than 1½ psig (10.4 kPa) nor more than 3 psig (20.7 kPa). Set pressure relief valve in test air supply line at 3 psig (20.7 kPa).

c. **Rectangular tanks**-Not more than 1-1/2 psig (10.4 kPa). Set pressure relief valve in test air supply line at 1-1/2 psig (10.4 kPa).
CAUTION: Do not leave pressurized tank unattended while the pressure line/air line is connected. Do not stand in front of tank heads or fittings when pressurizing tank.
Pressurizing of large tanks may result in the slight deformation of the top and bottom of vertical tanks, of the sides of rectangular tanks, and of the heads and ends of cylindrical tanks. Should deformation appear severe, immediately relieve the pressure.

3.2.2 Tank Pressurizing Procedure

3.2.2.1 The following air pressure testing does not apply to double-wall tanks equipped with interstitial vacuum monitoring systems. (In lieu of the air pressure test, the tank may be shipped from the factory with a vacuum in the tank interstice. Read and record the vacuum pressure. If the vacuum pressure gauge reading is less than 12 inches Hg (40.5 kPa), contact the tank manufacturer).

3.2.2.2 Install test piping as shown in Figure 2. Close valves A and B. Open valve C. Temporarily plug, cap or seal off remaining tank openings to hold pressure.

3.2.2.3 Connect the regulated test air supply line to test piping as shown in Figure 2.

3.2.2.4 Close valves B and C. Slowly open valve A to pressurize the primary tank. Pressure gauge 1 should indicate test air pressure given in Section 3.2.1 above.

3.2.2.5 Close valve A. Disconnect the regulated test air supply line from the test piping.

3.2.2.6 Monitor test pressure in the primary tank for 1 hour minimum. A steady drop in pressure reading for gauge 1 indicates there may be a leak in the primary tank. Check the fittings, the gauge, and then retest. If the problem persists, contact the tank manufacturer.

3.2.2.7 If no leaks are found, close valve C and slowly open valve B to pressurize the interstitial space between the double walls of the tank.
WARNING: Do not apply air pressure to the interstitial space between the walls of a double wall tank without air pressure in the primary tank. Do not apply air pressure to the interstitial space that is higher than the air pressure in the primary tank. Damage to the tank may result.
Pressure gauge 1 will indicate a slight drop in test pressure when valve B is opened, but should hold steady at the lower pressure. If the test pressure drops below the minimum requirements, close valve B, reconnect the air supply line and slowly open valve A to increase the pressure in the primary tank. When the required pressure is indicated on gauge 1 close valve A, disconnect the test air supply line. Open valve B to equalize pressure in the primary tank and the interstitial space. Gauge 1 and gauge 2 should have the same pressure reading.

3.2.2.8 Close valve B. Hold the test pressure in the interstitial space for 1 hour minimum. A steady drop in pressure gauge 2 indicates there may be a leak in the interstitial space. Check the fittings, the gauges, and then retest. If the problem persists, contact the tank manufacturer.

3.2.2.9 Proceed to Section 3.2.3, "Detection of Leaks" below.

3.2.3 Detection of Leaks

3.2.3.1 Immediately apply the leak test solution to the tank exterior surfaces, welds, fittings, etc. Check for leaks. No leaks are allowed. If leaks are found, notify the tank manufacturer. If no leaks are found, testing of the tank is complete.

3.2.3.2 Open valve C, then slowly open valve B to release the test air pressure.

3.2.3.3 With the tank depressurized, remove the test piping, temporary plugs, caps and seals. Reinstall the emergency relief vents, etc. which were removed in Section 3.2.1 above. Emergency vents are required on both the primary tank and the secondary tank.
WARNING: Emergency relief vents must be operable to prevent causing tank failure by over-pressurization.

4.0 TANK PIPING AND ACCESSORIES

4.1 Install all permanent piping and fittings using compatible, non-hardening thread sealant material.

4.2 All unused tank openings must be properly sealed and tested to be liquid and vapor tight prior to putting the tank into service.

4.3 DO NOT WELD ON THE TANK, MODIFY OR PENETRATE THE TANK STRUCTURE IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE TANK MANUFACTURER.

4.4 All tank accessories shall be installed as required per local codes. Anti-siphon devices, overfill shut-offs and alarms, vents gauges, emergency vents, etc. are common requirements for tanks storing motor fuels for the purpose of being dispensed into motor vehicles.

5.0 LABELING

5.1 Tanks shall be labeled in accordance with all applicable codes.

6.0 MAINTENANCE

6.1 The tank operator should perform periodic walk-around inspections to identify and repair areas of damage to the vessel or the coating itself and check for proper drainage around the tank area.

6.2 It is imperative that the tank exterior be inspected periodically to ensure that the integrity of the coating is maintained. The frequency of periodic repainting will be based upon environmental factors in the geographic area where the tank is located. Special consideration should be given to the selection of the paint, surface preparation and coating application. The coating selected should be suitable for use with the current coating, or the existing coating should be removed. The coating selected should be of industrial quality.

6.3 Proper site preparation and maintenance are vital to ensure drainage of surface water. Should ground conditions change or settlement occur, take the appropriate steps to maintain proper drainage and prevent standing water near or under the tank area.

6.4 The primary tank shall be inspected monthly for the presence of water at the lowest possible points inside the primary tank. Remove any water found. Water and sediment in fuel can cause plugging of filters. Also, bacterial growth, originating from the fuel can cause corrosion of tanks and lines. For procedures on how to check for the presence of water and removal of water, refer to API Recommended Practice 1621, Appendix D and API Standard 2610. Another source of information is a report by the US Department of Energy Brookhaven National Laboratory, BNL 48406, which provides information on methods to test for and remove water, test for bacterial presence in fuel, tank cleaning and fuel additives.

6.5 This tank must be removed from service if damaged by fire exposure, other physical means or misuse.

6.6 Failure to adhere with these maintenance instructions may void your warranty.

6.7 Tank relocation requirements - often aboveground storage tanks are relocated. The following instructions are to be followed when this occurs: All steps are to be documented and the documentation is to be kept for the life of the tank.

6.7.1 The hazards associated with the cleaning, entry, inspection, testing, maintenance or other aspects of ASTs are significant. Safety considerations and controls should be established prior to undertaking physical activities associated with ASTs. Cleaning of tanks must be per state and local jurisdiction requirements.

6.7.2 Refer to the STI Standard SP001, "Standard for the Inspection of Aboveground Storage Tanks" for requirements concerning tank inspections. This SP001 Standard details requirements for inspections based on the tank installation and age. A tank must undergo the appropriate inspection prior to relocation.

6.7.3 In addition, the tank must be subjected to a pressure (or vacuum) test as detailed paragraph 3.2 above except an inert gas, such as nitrogen, should be used for tanks that have previously held fuel.

Disclaimer

These instructions are intended only as an aid to tank installers who are knowledgeable and experienced in aboveground tank installation. Compliance herewith does not necessarily meet the requirements of applicable federal, state and local laws, regulations and ordinances concerning tank installation. STI makes no warranties, express or implied, including but not limited to, any implied warranties of merchantability or fitness for a particular purpose, as a result of these installation instructions.

These instructions are intended only as an aid to tank installers who are knowledgeable and experienced in aboveground tank installation. Compliance herewith does not necessarily meet the requirements of applicable federal, state and local laws, regulations and ordinances concerning tank installation. STI makes no warranties, express or implied, including but not limited to, any implied warranties of merchantability or fitness foe a particular purpose, as a result of these installation instructions.

Fireguard® Limited Warranty Validation Card

Please complete this form to validate your Limited Warranty. This card must be completely and accurately filled out and returned to STI within 30 days after the tank is installed, or within 90 days after the tank is shipped from the manufacturer, whichever comes first. Warranty limitations may exist based on the product stored in the tank, please refer to the limited warranty document supplied with this form. By signing this form, the tank owner verifies that the tank was installed in accordance with STI Installation Instructions, the product stored is compatible with the tank, and the owner has read and agrees with the terms of the Limited Warranty, included with this form.

Fireguard Label #: _____ **Shipment Date:** _____

Manufacturer's Name: _____ **Installed Date:** _____

TANK LOCATION INFORMATION

Name of Facility (where tank is installed): _____

Street address: _____

City: _____ **State:** _____ **ZIP:** _____ **Country:** _____

Contact: _____ **Phone:** _____

Check Product(s) Stored in this Tank:

- ☐ Wastewater or Water
- ☐ Heating Oil (Petroleum #1, #2, #4, #5 WHICH IS NOT HEATED)
- ☐ Diesel fuel or kerosene for powering motor vehicles
- ☐ Diesel for powering generators
- ☐ Gasoline
- ☐ Alcohol Blended Gasoline
- ☐ AVGAS
- ☐ Biodiesel
- ☐ Crude Oil
- ☐ Oil/Water Separator
- ☐ Jet Fuel
- ☐ E85
- ☐ Waste Oil
- ☐ Other: _____
- ☐ Product which is heated during storage _____
- ☐ #6 Heated Oil

Check Type of Facility Where Tank is Installed:

- ☐ Private Residence
- ☐ Farm/Nursery
- ☐ Gas Station
- ☐ Convenience Store
- ☐ Jobber
- ☐ Quick Lube
- ☐ Car Dealer
- ☐ Fleet Owner
- ☐ Other _____
- ☐ Hospital
- ☐ School
- ☐ Government
- ☐ Marina
- ☐ Airport
- ☐ Industrial Site
- ☐ Utility Site

MAILING ADDRESS FOR TANK OWNER

Owner name: _____ **Phone:** _____

Mailing address: _____ **P.O. Box :** _____

City: _____ **State:** _____ **Zip:** _____

INSTALLER INFORMATION

Installation Company Name: _____ **Phone:** _____

SIGNATURE REQUIRED

My signature below verifies that this tank was installed in accordance with STI Installation Instructions, the product stored is compatible with the tank and I have read and agree with the terms of the Limited Warranty, provided with this document.

Signature (of person providing this information): _____ **Date:** _____

Please Print Name: _____

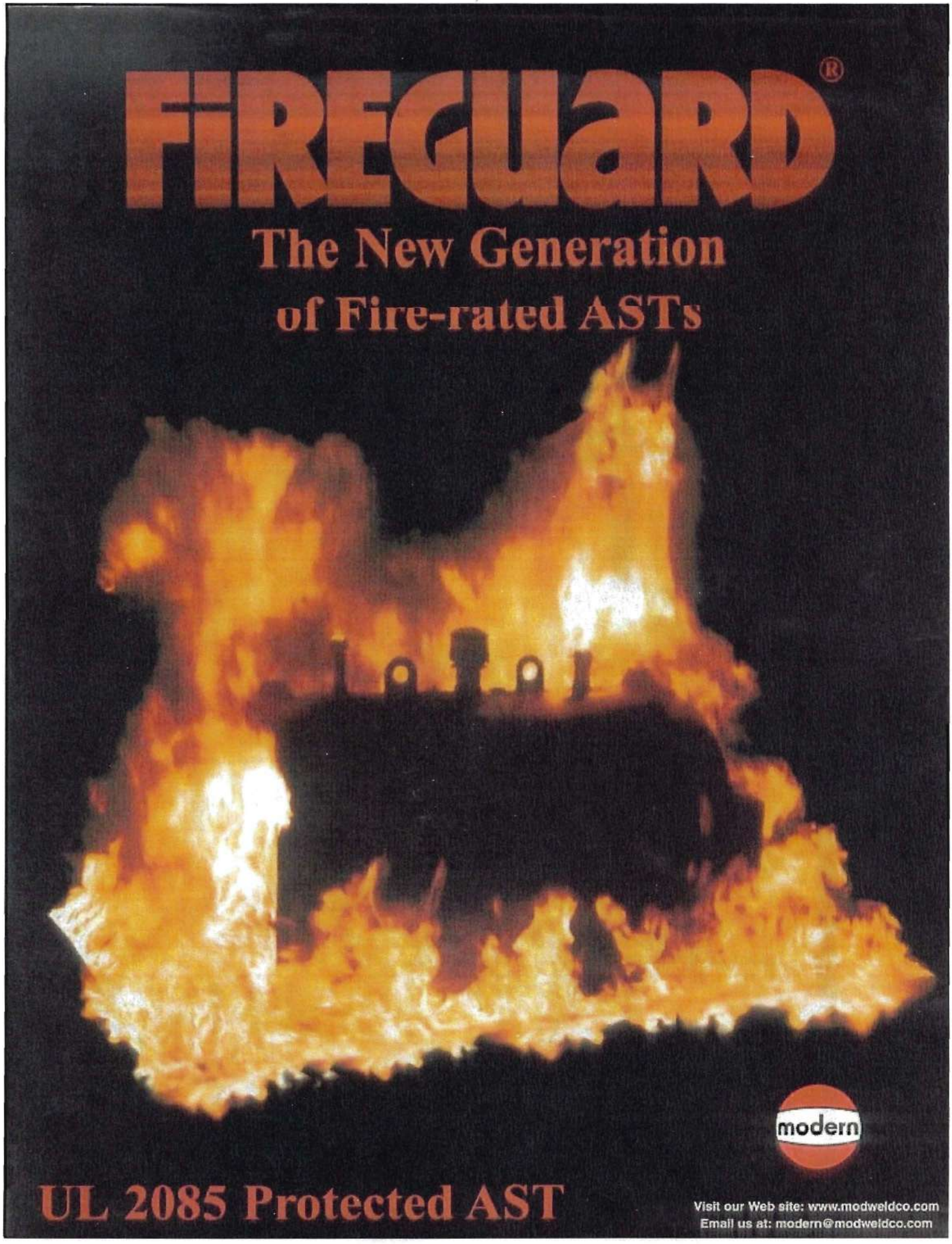
Company Name: _____ **Phone:** _____

Thank you for completing this document and returning it to the STI address below:

STEEL TANK INSTITUTE • 944 Donata Court • Lake Zurich, IL 60047 • 847/438-8265 • FAX 847/438-8766

FIREGUARD®

The New Generation of Fire-rated ASTs



modern

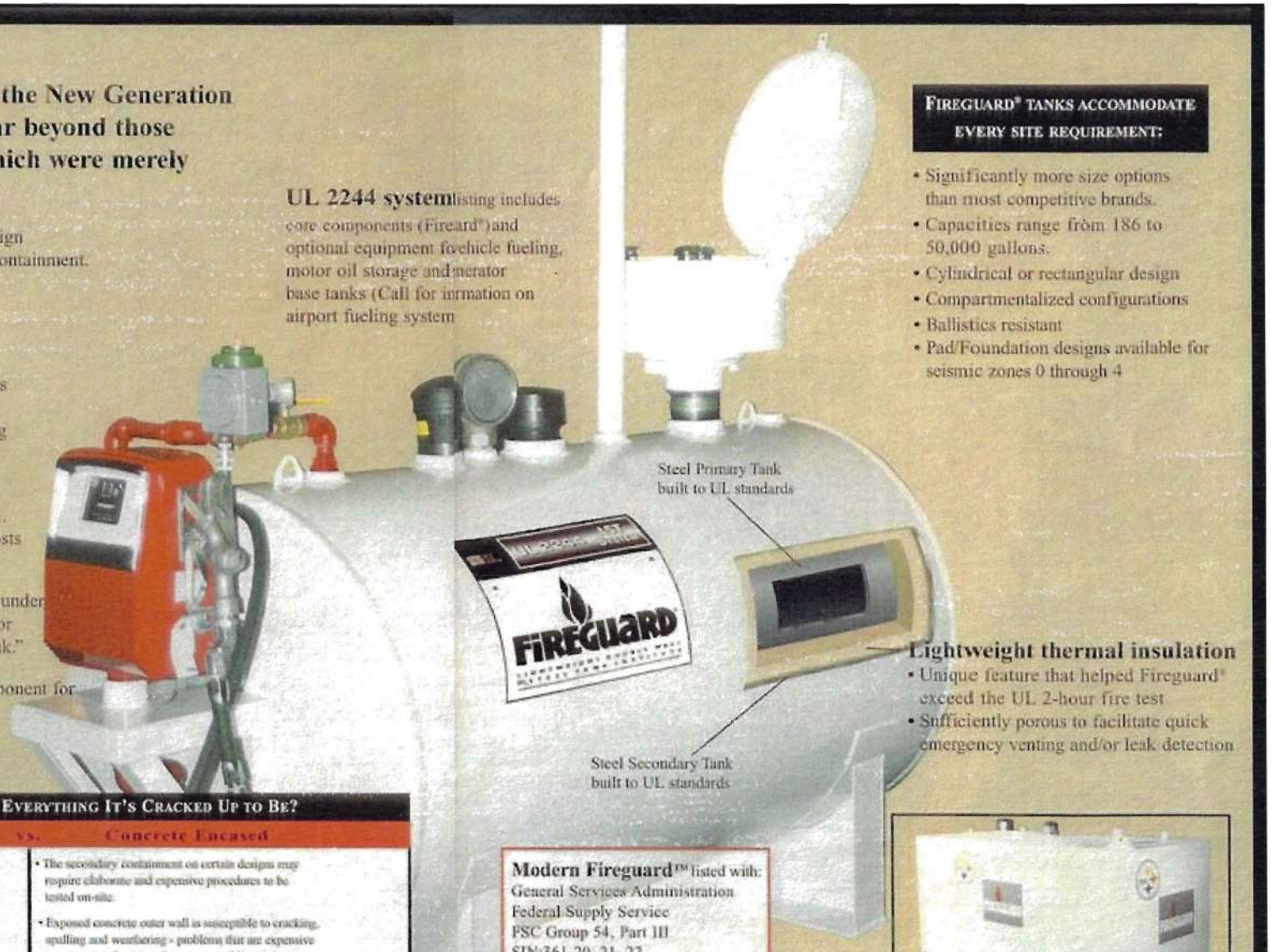
UL 2085 Protected AST

Visit our Web site: www.modweldco.com
Email us at: modern@modweldco.com

FIREGUARD® is the New Generation of fire-rated ASTs, going far beyond those "first generation" tanks which were merely enclosed in concrete.

- Fireguard® was the first AST of its design to obtain a UL Listing for secondary containment.
- Fireguard®'s secondary containment can be tightness tested on-site with standard testing procedures!
- Fireguard®'s exterior steel wall provides superior weatherability and low-cost maintenance. Unlike concrete, cracking or spalling will never be a problem!
- Fireguard®'s unique thermal insulating material is 75% lighter than concrete... shipping, installation and relocation costs are reduced!
- The Fireguard® technology is patented under U.S. Patent #5695089 and #5809650 for "Lightweight Double Wall Storage Tank."
- Fireguard® is a UL approved core component for the 2244 system listing

UL 2244 system listing includes core components (Fireard®) and optional equipment for vehicle fueling, motor oil storage and generator base tanks (Call for information on airport fueling system



FIREGUARD® TANKS ACCOMMODATE EVERY SITE REQUIREMENT:

- Significantly more size options than most competitive brands.
- Capacities range from 186 to 50,000 gallons.
- Cylindrical or rectangular design
- Compartmentalized configurations
- Ballistics resistant
- Pad/Foundation designs available for seismic zones 0 through 4

Lightweight thermal insulation

- Unique feature that helped Fireguard® exceed the UL 2-hour fire test
- Sufficiently porous to facilitate quick emergency venting and/or leak detection

Modern Fireguard™ listed with:
General Services Administration
Federal Supply Service
FSC Group 54, Part III
SIN:361-20, 21, 22
Contract No: GS-07F-0134K

IS YOUR ABOVEGROUND TANK EVERYTHING IT'S CRACKED UP TO BE?

FIREGUARD®	vs. Concrete Encased
• Secondary containment is testable on-site using standard, economical testing procedures.	• The secondary containment on certain designs may require elaborate and expensive procedures to be tested on-site.
• Fireguard®'s steel outer wall provides low-cost maintenance and protects the insulation material from weathering.	• Exposed concrete outer wall is susceptible to cracking, spalling and weathering - problems that are expensive to correct and are usually not covered by warranty.
• An average 12,000 gallon Fireguard® weighs under 30,000 pounds - well within the legal load limit for trucking.	• An average 12,000 gallon concrete-encased tank weighs upwards of 100,000 pounds - imagine the hassles involved in handling that tank.
• 30-year warranty is standard with every Fireguard®.	• Some manufacturers may charge extra for a 30-year warranty.

FIREGUARD® SPECIFICATIONS

CYLINDRICAL DESIGN

SAMPLE OUTER TANK DIMENSIONS (inches)				SAMPLE OUTER TANK DIMENSIONS (inches)			
GALLONS	DIAMETER	LENGTH	APPROX. WEIGHT (lbs.)	GALLONS	DIAMETER	LENGTH	APPROX. WEIGHT (lbs.)
186	48	54	1,750	4,000	90	174	12,300
250	48	68	2,100	5,000	102	168	13,750
300	50	72	2,350	6,000	102	198	15,500
500	60	76	3,100	8,000	102	258	20,000
560	60	84	3,350	10,000	102	330	24,500
1,000	70	78	3,800	12,000	102	390	28,000
1,500	70	114	5,500	15,000	126	312	34,500
2,000	70	150	6,500	20,000	126	414	39,500
2,500	70	186	7,900	25,000	126	516	49,000
3,000	70	222	9,000	30,000	126	618	74,000

RECTANGULAR DESIGN

	SAMPLE OUTER TANK DIMENSIONS (inches)			
GALLONS	LENGTH	WIDTH	HEIGHT	APPROX. WEIGHT (lbs.)
186	44	44	55	2,100
250	117	36	36	3,100
290	78	50	36	2,800
500	140	51	36	4,800
750	140	72	35	6,100
1,000	127	72	36	4,300
1,000	88	72	50	3,800
1,500	124	88	43	5,400
2,000	140	86	50	6,300
2,000	140	72	60	6,100
2,500	140	88	60	7,000
3,000	250	72	50	10,900
3,000	117	102	72	8,800
4,000	331	72	50	14,100
4,000	154	102	72	10,900
5,000	336	72	60	15,600
5,000	191	102	72	13,100
6,000	402	72	60	18,400
6,000	228	102	72	15,200
8,000	370	102	60	21,500
8,000	302	102	72	19,400
10,000	460	102	60	26,300
10,000	376	102	72	23,700
12,000	451	102	72	27,900
15,000	386	102	102	36,500
18,000	462	102	102	42,900
24,700	465	137	102	51,650

Note: Consult manufacturer for exact dimensions. Weights shown may vary.

FIREGUARD®: THE ONLY TANK THAT MEETS ALL OF THESE STANDARDS

- UL 2085 Listed as both a "Protected" and a "Fire-Resistant" AST
- UL Listed Secondary Containment comes standard with every tank
- Both the Inner and Outer steel tanks are built to UL standards
- Uniform Fire Code UFC - Article 79 as a "Protected Tank"
- UL 2244 Aboveground Flammable Liquid Tank System
- National Fire Protection Association (NFPA) 30 & 30A
- Ballistics protection per UFC Article 79, and per UL2085
- Impact protection per UFC Article 79, and per UL 2085
- California Air Resources Board (CARB) testing requirements for air emissions
- Steel Tank Institute (STI) Standard F941 for Thermally Insulated Aboveground Storage Tanks

> **Fireguard® comes with a 30-year warranty, and is backed by a third-party insurance company**
> **Fireguard® warranty remains in force if tank is relocated by the same owner**
> **STI's Independent quality control inspectors further ensure consistently high fabrication standards**

MODERN WELDING COMPANY OF GEORGIA, INC
300 Prep Phillips Dr., Augusta, GA 30901
Phone: (706) 722-3411 Fax: (706) 724-8133

MODERN WELDING COMPANY OF TEXAS, INC
715 Sakowitz Street, Houston, TX 77020
Phone: (713) 675-4211 Fax: (713) 673-4062
200 North Main, Rhome, TX 76078
Phone: (817) 636-2215 Fax: (817) 636-2680

MODERN WELDING COMPANY OF FLORIDA, INC.
1801 Atlanta Avenue, Orlando, FL 32806
Phone: (407) 843-1270 Fax: (407) 423-8187

MODERN WELDING COMPANY OF CALIFORNIA, INC
4141 North Brawley Avenue, Fresno, CA 93722
Phone: (559) 275-9353 Fax: (559) 275-4381

MODERN WELDING COMPANY OF IOWA, INC
2818 Mt. Pleasant Road, Burlington, IA 52601
Phone: (319) 754-6577 Fax: (319) 754-8428

MODERN WELDING COMPANY OF OHIO, INC
72 Waldo Street, Newark, OH 43055
Phone: (740) 344-9425 Fax: (740) 344-6018

MODERN WELDING COMPANY OF OWENSBORO, INC
1450 East Parrish Avenue, Owensboro, KY 42303
Phone: (270) 683-5323 Fax: (270) 684-5245

Visit our Web site: www.modweldco.com
Email us at: modern@modweldco.com

Regional Shipments reduce shipping costs!
Contact the nearest Modern Welding Subsidiary for price and delivery

130-50-0001 5/00-7M

FACILITY SPCC PLAN INFORMATION

4509 North Star Blvd., Great Falls, MT 59405 • Ph: (406) 453-5478 or 1-800-220-2703
Email: crystalm@nciengineering.com or spettis@nciengineering.com

NCI Engineering

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Owner or Operator Name _____

Owner or Operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Oil Storage Containers Maintenance Shop

Oil Storage Containers and Capacities

Include a complete list of all oil storage containers (aboveground containers[a] and completely buried tanks) with capacity of 55 U.S. gallons or more. For mobile/portable containers, provide an estimated number of containers, types of oil, and anticipated capacities. 12

Oil Storage Container *(indicate whether aboveground (A) or completely buried (B))*	Type of Oil	Shell Capacity (gallons)
A Tote	Def ISO 22241	330
A Drum Secondary	ATF	55
A Drum [redacted]	Mega plex XDS Grease	55
A Tote	Hydraulic oil AW 32	270
A Drum	All season Antifreeze	55
A Drum	Zerex HD anti freeze	55
A Tote	SAE 15W-40 oil	270
A Tote Secondary	Wiper fluid	80
A Tote Secondary	0W20 oil	80
A Tote Secondary	5W30 oil	80
A Drum	CAT Drivetrain oil	55
A Drum	Universal Tractor oil	55

Total Aboveground Storage Capacity[c] 1440 Gallons
Total Completely Buried Storage Capacity _____ Gallons
Facility Total Oil Storage Capacity 1440 Gallons

[a] Above ground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

FACILITY SPCC PLAN INFORMATION

4509 North Star Blvd., Great Falls, MT 59405 • Ph: (406) 453-5478 or 1-800-220-2703
Email: crystalm@nciengineering.com or spettis@nciengineering.com

NCI Engineering

Facility Description

Facility Name _____

Facility Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Owner or Operator Name _____

Owner or Operator Address _____

City _____ State _____ ZIP _____

County _____ Tel. Number ( ) -

Oil Storage Containers

Oil Storage Containers and Capacities

Include a complete list of all oil storage containers (aboveground containers[a] and completely buried tanks) with capacity of 55 U.S. gallons or more. For mobile/portable containers, provide an estimated number of containers, types of oil, and anticipated capacities.

Oil Storage Container *(indicate whether aboveground (A) or completely buried (B))*	**Type of Oil**	**Shell Capacity (gallons)**
(A) N.W corner of Utility Shop	SAE 15W-40	55 gallons (Barrel)
(A) N.W corner of Utility Shop. Spill kit + Containment For Both.	Stoddard Solvent	55 gallons (Barrel)
(A) West Wall of Sewer Jet Shop Spill Kit + Containment	DEF (diesel Additive)	55 gallons (Barrel)
(A) No Containment Center of Cold Storage building	Kerosene	(2) 55 gallons (Barrels)
In front of Central garage	Waste oil	500 gallon

Total Aboveground Storage Capacity[c] _____ Gallons

Total Completely Buried Storage Capacity _____ Gallons

Facility Total Oil Storage Capacity _____ Gallons

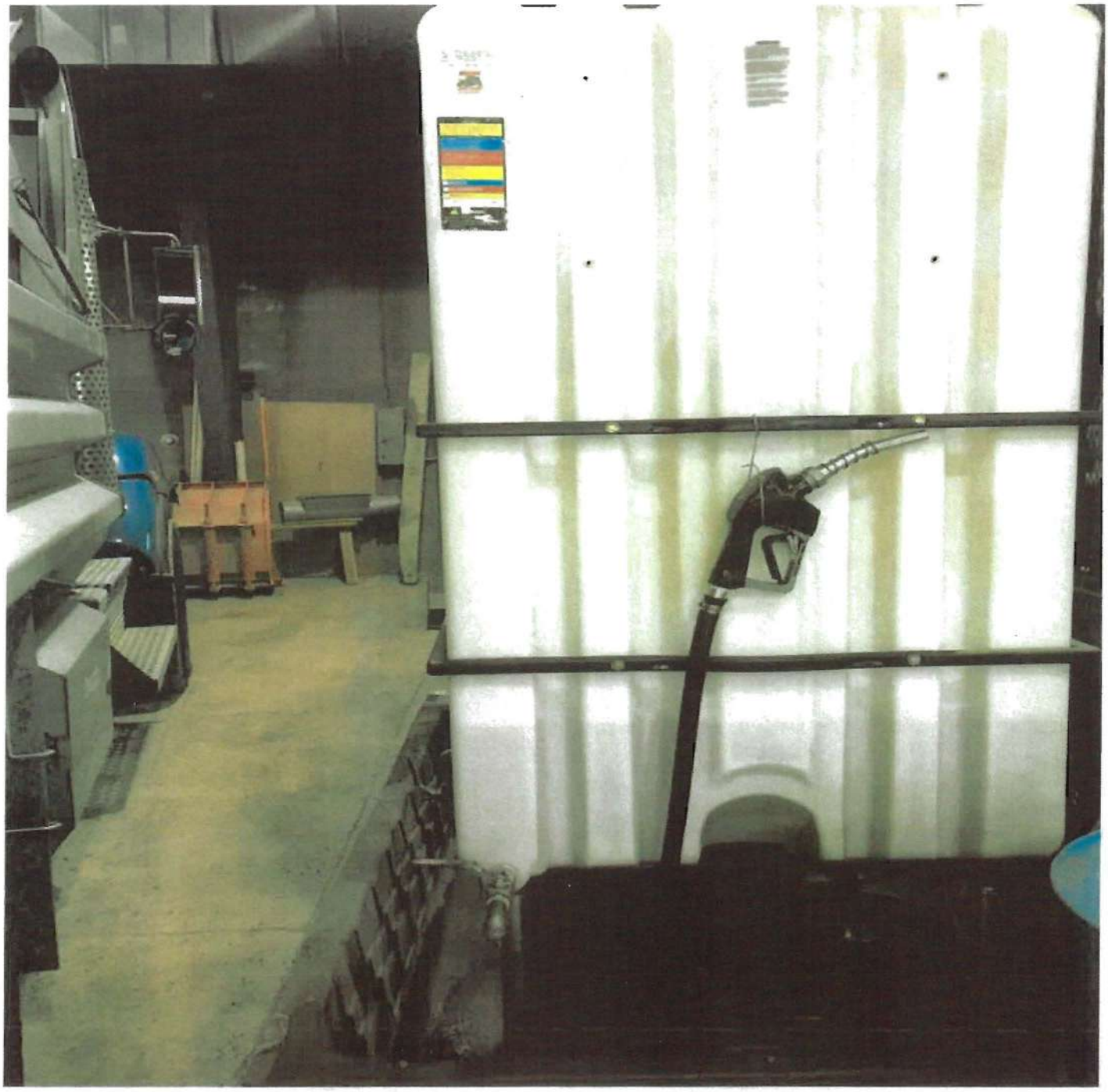
[a] Above ground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

Street Division Products

Table of Contents

Unitex Q-2

Unitex Q-2 is an asphalt release agent. It is stored in a 290 gallon container standing in a liquid containment shell that is 7'6"x4'6"x15". This Containment shell is shared with Citra Clean.



Citra Clean Concentrate

Citra Clean when mixed with water at a ratio of 5:1 (5 parts water) is stored in a 290 gallon container standing in a liquid containment shell that is 7'6"x4'6"x15". This containment shell is shared with Unitex Q-2.

Anti-Freeze

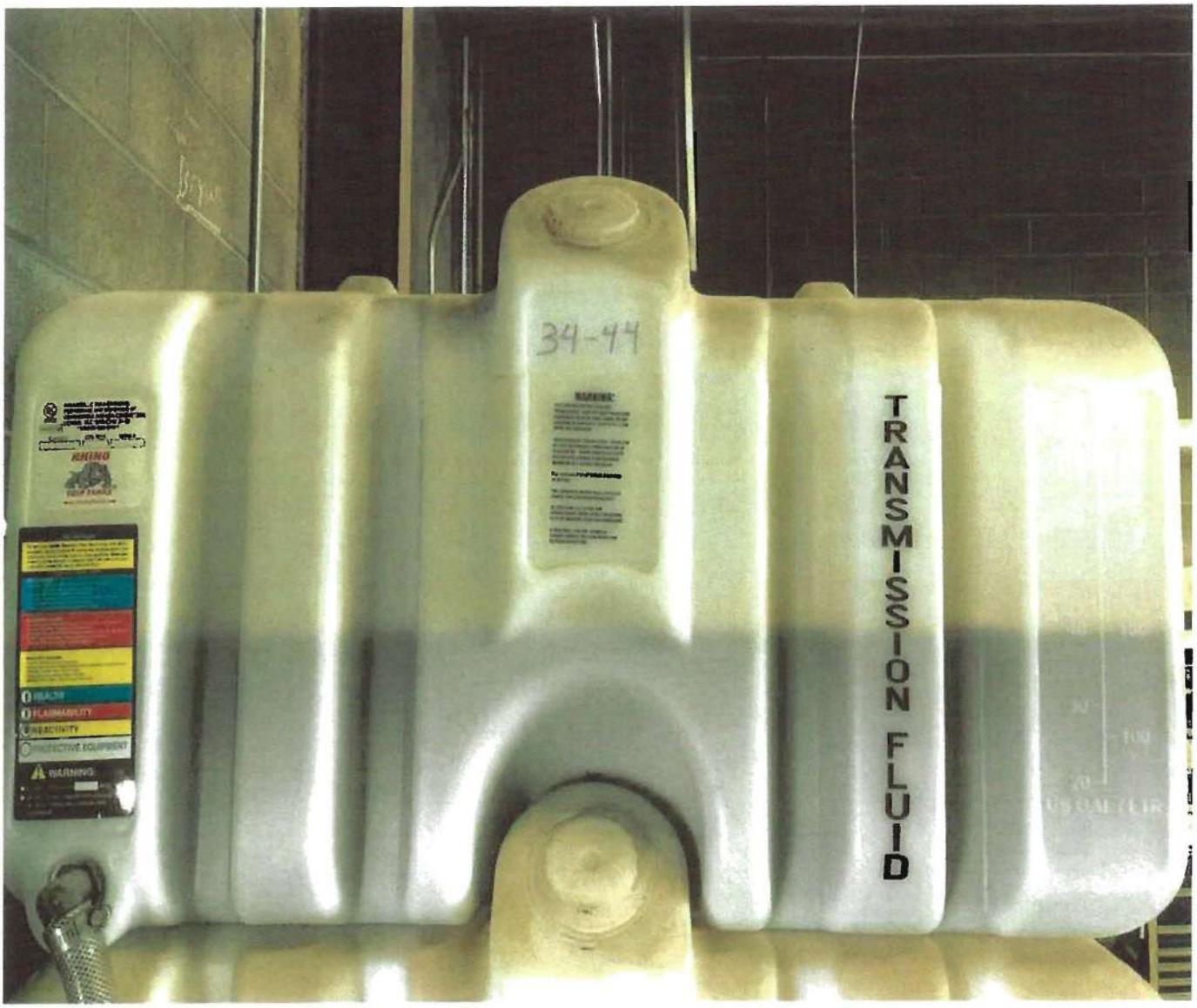
When mixed 1:1 with water, Anti-Freeze is stored in an 80 gallon container.

Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"

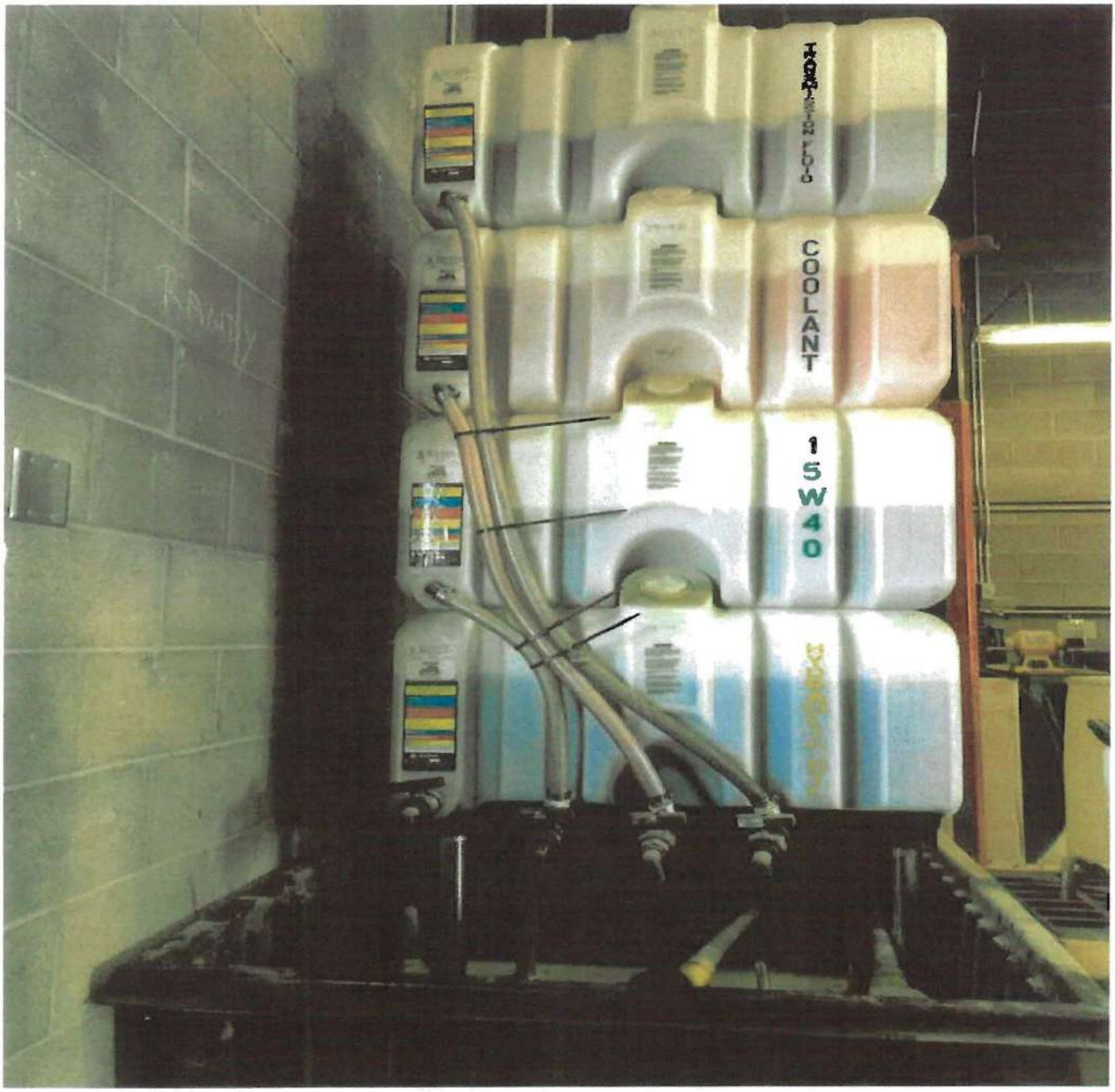
Transmission Fluid

Transmission fluid is stored in an 80 gallon container.

Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"

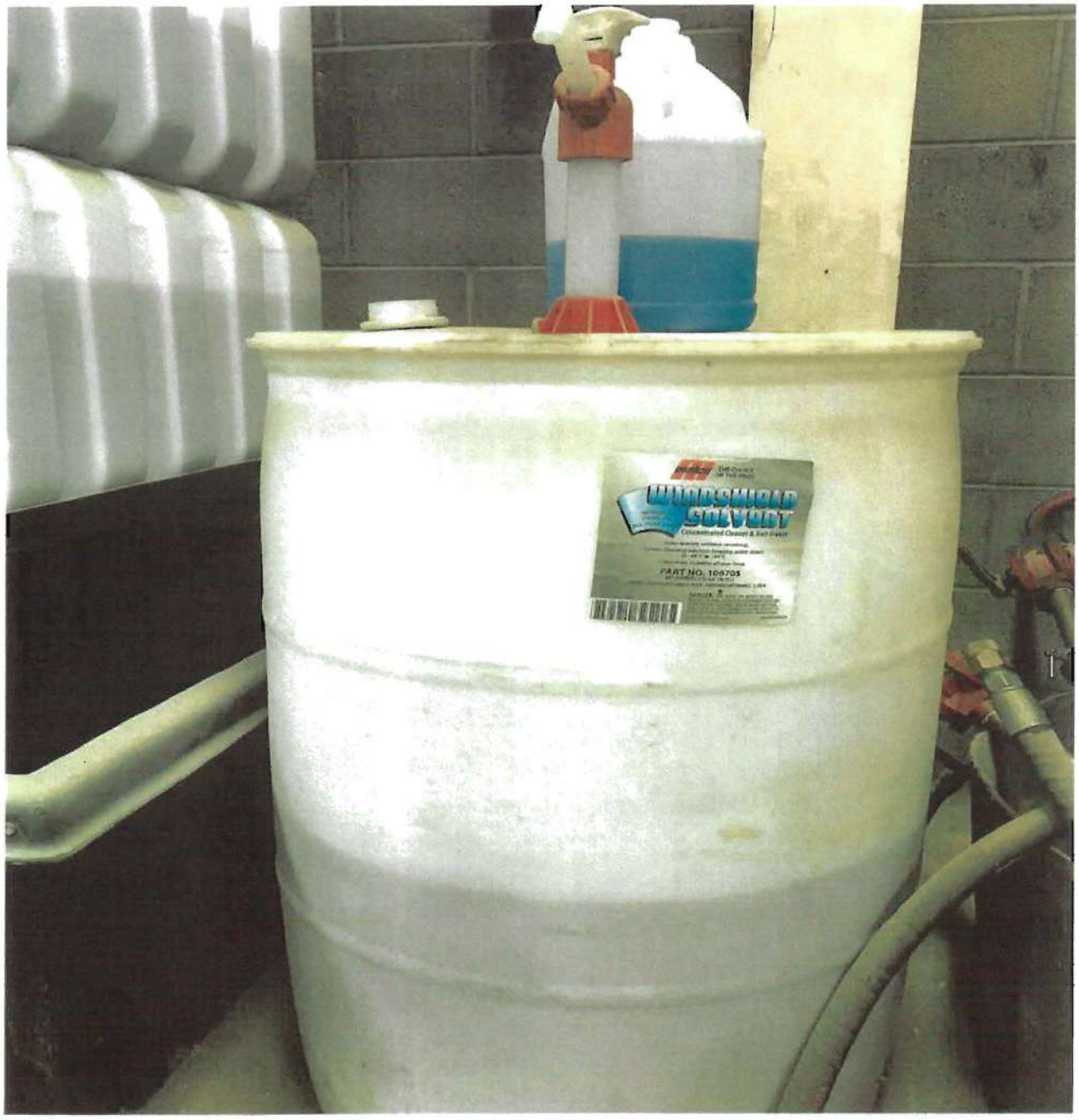


Hydraulic oil, Coolant, 15-40 Motor Oil, and Transmission fluid containers are stacked containers all sharing the same containment shell that measures at 60"x40"x20"



Windshield Washer Fluid

Washer Fluid is stored in a 55 Gallon Drum



Unitex and Citra Clean Portable Tank

Unitex and Citra Clean are stackable tanks Unitex is a 110 Gallon tank and Citra Clean is a 30 Gallon tank. They are stored in truck 802 during summer months. They share the same containment shell that measures 64"x41"x16".

Crystal Morgan

From: Russell Brewer [rbrewer@greatfallsmt.net]
Sent: Thursday, March 14, 2019 8:35 AM
To: 'Crystal Morgan'
Subject: PW Complex SPCC Plan
Attachments: 20190312_125522.jpg; 20190312_125757.jpg

Hi Crystal,

Here are the photos I have of the fuel station, if you need more or others let me know we can get those to you.

Just found out this morning that we do have two portable 100 gallon fuel tanks in the Street Department.

Thanks for your assistance with this project.

Russell Brewer, P.E.
Senior Civil Engineer
P.O. Box 5021
1025 25th Ave NE
Great Falls, MT 59403
Phone 406-455-8129
Fax 406-771-0700
rbrewer@greatfallsmt.net

Safety Data Sheet

ENNIS-FLINT
A Traffic Safety Solutions Company

according to OSHA Hazard Communication
29 CFR Part 1910.1200

according to Regulation (EC)
No. 1907/2006 Article 31

Section 1. Identification

Product Code: 985222

Product Name: WB YEL HI BUILD 1952E3 98PA30

Product Type: WB Paint

Recommended Use: Traffic Markings

Supplied by:
Ennis-Flint
A Traffic Safety Solutions Company
115 Todd Court
Thomasville, NC 27360
T: 800.331.8118 (For Technical Inquiries)

Emergency Telephone: Chemtrec 1-800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: No Information

Classification

Symbol(s) of Product

No GHS Symbols Exist

Signal Word

GHS Named Chemicals On Label
No GHS Named Chemicals exist in this product

Section 3. Composition/Information on ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Ammonium hydroxide	1336-21-6	0.1-1.0	GHS05-GHS07	H302-314-335

Chemical Name	CAS-No.	EINECS No.	REACH Reg No.	M-Factors
Ammonium hydroxide	1336-21-6	215-647-6	not available	0

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air. Consult a physician if symptoms persist.

FIRST AID - SKIN CONTACT: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and

launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

Section 6. Accidental release measures

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment. Ensure adequate ventilation. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically. Keep in suitable and closed containers for disposal.

Section 7. Handling and storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid dust formation.

STORAGE: Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Ammonium hydroxide	25 ppm	35 ppm		

Name	Percentage	VME mg/m3	VME ppm	OEL Nota
No hazardous items exist				

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

SKIN PROTECTION: Protective gloves

EYE PROTECTION: Safety glasses with side-shields.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance:	clear	**Physical State:**	Liquid
Odor:	Ammonia	**Odor Threshold:**	Not Established
Density, g/cm3:	0.999	**pH:**	10-12
Freeze Point, °C:	NI	**Viscosity:**	NI
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	NI
Decompostion Temp., °C:	NI		
Boiling Point, °C:	N.I.	**Explosive Limits, vol%:**	N.I.
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>94
Evaporation Rate:	Slower than Diethyl Ether	**Auto-ignition Temp., °C:**	NI
Vapor Density:	Heavier than air	**Vapor Pressure:**	NI

(See "Other information" Section for abbreviation legend)

Section 10. Stability and reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Dust formation. Do not freeze.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

Section 11. Toxicological information

Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Sanding and grinding dust may be harmful if inhaled.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name according to EEC	Oral LD50	Dermal LD50	Gas LC50
1336-21-6	Ammonium hydroxide	350 mg/kg rat	> 2000 mg/kg	>20001 ppm

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated.

Further Ecological Information
Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name according to EEC	Bio. Conc. Factor (BCF)	Octanol-water par. Coeff (KOW)
1336-21-6	Ammonium hydroxide	not available	not available

Section 13. Disposal considerations

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not re-use empty containers.

European Waste Code: 080199 waste, not otherwise specified

Uncleaned Packaging

European Waste Code: 150110 packaging dangerous residuals

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Road Transport

UN Number:	not regulated
ADR/RID Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Road Tunnel Transport Code:	not regulated

Sea Transport

UN Number:	not regulated
IMDG/GGVSee Class:	not regulated
EmS-No:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Marine Pollutant:	Not A Marine Pollutant
Shipping Hazard(Marine Pollutant):	No Information

Air Transport

UN Number:	not regulated
ICAO/IATA Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information

Section 15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: Non-controlled

Denmark

B-Value: 0.000000

France

Storage Conditions: No Information

Professional Illness Table:

CAS Number	Chemical Name	Professional Illness
1336-21-6	Ammonium hydroxide	not available

Germany

VbF-Class: No Information

WGK-class: 1

Remarks:
WGK 0 = in general not a water pollutant
WGK 1 = weak water pollutant
WGK 2 = water pollutant
WGK 3 = severe water pollutant

Processing restrictions:*

Incident Regulation:
No Information

Spain

Storage Conditions: No Information

Switzerland

VOC-Value: 0.00

United Kingdom

Storage Conditions: No Information

Section 16. Other information, including date of preparation of the last revision

Revision Date: 1/10/2016 **Supercedes Date:** 1/8/2016

Reason for revision: Substance and/or Product Properties Changed in Section(s):
09 - Physical & Chemical Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Personal Protection:	X

NFPA Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Hazards:	N.I.

Volatile Organic Compounds, gr/ltr: 1,030

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS05 

GHS07 

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

Safety Data Sheet

ENNIS-FLINT
A Traffic Safety Solutions Company

according to OSHA Hazard Communication 29 CFR Part 1910.1200

according to Regulation (EC) No. 1907/2006 Article 31

Section 1. Identification

Product Code: 985201

Product Name: WB WHT FAST DRY 1952E 1/2

Product Type: WB Paint

Recommended Use: Traffic Markings

Supplied by:
Ennis-Flint
A Traffic Safety Solutions Company
115 Todd Court
Thomasville, NC 27360
T: 800.331.8118 (For Technical Inquiries)

Emergency Telephone: Chemtrec 1-800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: No Information

Classification

Symbol(s) of Product

No GHS Symbols Exist

Signal Word

GHS Named Chemicals On Label
No GHS Named Chemicals exist in this product

Section 3. Composition/Information on ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Ammonium hydroxide	1336-21-6	0.1-1.0	GHS05-GHS07	H302-314-335

Chemical Name	CAS-No.	EINECS No.	REACH Reg No.	M-Factors
Ammonium hydroxide	1336-21-6	215-647-6	not available	0

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air. Consult a physician if symptoms persist.

FIRST AID - SKIN CONTACT: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and

launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

Section 6. Accidental release measures

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment. Ensure adequate ventilation. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically. Keep in suitable and closed containers for disposal.

Section 7. Handling and storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid dust formation.

STORAGE: Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Ammonium hydroxide	25 ppm	35 ppm		

Name	Percentage	VME mg/m3	VME ppm	OEL Nota
No hazardous items exist				

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

SKIN PROTECTION: Protective gloves

EYE PROTECTION: Safety glasses with side-shields.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance:	clear	**Physical State:**	Liquid
Odor:	Ammonia	**Odor Threshold:**	Not Established
Density, g/cm3:	0.999	**pH:**	10-12
Freeze Point, °C:	NI	**Viscosity:**	NI
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	NI
Decompostion Temp., °C:	NI		
Boiling Point, °C:	N.I.	**Explosive Limits, vol%:**	N.I.
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>94
Evaporation Rate:	Slower than Diethyl Ether	**Auto-Ignition Temp., °C:**	NI
Vapor Density:	Heavier than air	**Vapor Pressure:**	NI

(See "Other information" Section for abbreviation legend)

Section 10. Stability and reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Dust formation. Do not freeze.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

Section 11. Toxicological information

Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Sanding and grinding dust may be harmful if inhaled.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name according to EEC	Oral LD50	Dermal LD50	Gas LC50
1336-21-6	Ammonium hydroxide	350 mg/kg rat	> 2000 mg/kg	>20001 ppm

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated.

Further Ecological Information
Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No.	Name according to EEC	Bio. Conc. Factor (BCF)	Octanol-water par. Coeff (KOW)
1336-21-6	Ammonium hydroxide	not available	not available

Section 13. Disposal considerations

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not re-use empty containers.

European Waste Code: **080199 waste, not otherwise specified**

Uncleaned Packaging

European Waste Code: **150110 packaging dangerous residuals**

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Road Transport

UN Number:	not regulated
ADR/RID Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Road Tunnel Transport Code:	not regulated

Sea Transport

UN Number:	not regulated
IMDG/GGVSee Class:	not regulated
EmS-No:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information
Marine Pollutant:	Not A Marine Pollutant
Shipping Hazard(Marine Pollutant):	No Information

Air Transport

UN Number:	not regulated
ICAO/IATA Class:	not regulated
Packing Group:	No Information
Shipping Name:	not regulated
Primary Shipping Hazard:	No Information

Section 15: Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Chemical Name	CAS-No.
Ammonium hydroxide	1336-21-6

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Water	7732-18-5
Propylene Glycol	57-55-6

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: Non-controlled

Denmark

B-Value: 0.000000

France

Storage Conditions: No Information

Professional Illness Table:

CAS Number	Chemical Name	Professional Illness
1336-21-6	Ammonium hydroxide	not available

Germany

VbF-Class: No Information

WGK-class: 1

Remarks:
WGK 0 = in general not a water pollutant
WGK 1 = weak water pollutant
WGK 2 = water pollutant
WGK 3 = severe water pollutant

Processing restrictions:*

Incident Regulation:
No Information

Spain

Storage Conditions: No Information

Switzerland

VOC-Value: 0.00

United Kingdom

Storage Conditions: No Information

Section 16. Other Information, Including date of preparation of the last revision

Revision Date: 1/10/2016 **Supercedes Date:** 1/8/2016

Reason for revision: Substance and/or Product Properties Changed in Section(s):
09 - Physical & Chemical Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Personal Protection:	X

NFPA Ratings:

Health:	0	Flammability:	0	Reactivity:	0	Hazards:	N.I.

Volatile Organic Compounds, gr/ltr: 1,030

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS05 

GHS07 

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

ENNIS-FLINT
A Traffic Safety Solutions Company

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Certificate of Compliance

Date:	3/6/2019
Code:	985201
Description:	WB WHT FAST DRY 1952F 1 / 2
Batch:	MP1902W0041
Color:	White
Quantity:	6,050 Gallons
MFG Date:	3/4/2019

Property	UOM	Min	Max	Actual
Solids Content % Wt, Instrument Data				76.42
Pigment Content % (ash - organic pigment)	%	60	62	60.33
NVV, Non-volatile vehicle	%			40.56
Weight	lbs./gallon	--	--	14.03
Viscosity	KU	80	90	80
Directional Reflectance	%	85	--	88.35
Color Match Fed Std 595-37925		--	--	Pass
Fineness of Grind		3	--	4
Dry Opacity (5 wet mils)	Unit	0.92	--	0.961
Dry Time (No pick-up)	minutes	--	10	8
Bleeding Ratio		0.95	--	Pass
VOC	grams/liter	--	100	89.54

This product does not contain mercury, lead, hexavalent chromium, toluene, chlorinated solvents, hydrolyzable chlorine derivatives, ethylene based glycol ethers and their acetates, nor any carcinogen as defined in 29-CFR 1910.1200.

Having the authority to act for Ennis-Flint, I do hereby certify that the traffic paint data hereon complies with all applicable specifications.

Name: *Thomas Elizondo*

Title: Quality Manager

ENNIS-FLINT
A Traffic Safety Solutions Company

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Certificate of Compliance

Date:	3/6/2019
Code:	985201
Description:	WB WHT FAST DRY 1952F 1 / 2
Batch:	MP1902W0041
Color:	White
Quantity:	6,050 Gallons
MFG Date:	3/4/2019

Property	UOM	Min	Max	Actual
Physical Characteristics				
Condition in Container				Homogenous
Appearance				Smooth
Storage Stability		No Caking or Settling		Pass
Lead (Pb) Content		None/Lead-free		Pass
Chromium (Cr) Content		None/Chrome-free		Pass
Freeze-Thaw Stability	KU	-5	+5	Pass
Heat Stability	KU	-10	+10	Pass
Skinning				Pass
Accelerated Package Stability	days	14		Pass
Flexibility		180°/13 min mandrel		Pass
Abrasion Resistance				Pass
Accelerated Weathering				Pass
Abrasion Resistance				Pass
Baked Films	liters	150		Pass
Weathered Films	grams	150		Pass
Titanium Dioxide Content	g/L	120		Pass
Scrub Test				Pass
Paint Characteristics				

Manufactured by:
Ennis-Flint
10658 W. State Hwy. 294
Palestine, TX 75801
Phone: (903) 538-2271
Fax: (903) 538-2276

Corporate Office:
Ennis-Flint
4161 Piedmont Parkway
Suite 370
Greensboro, NC 27410
Phone: (800) 331-8118
Fax: (336) 475-7900

Certificate of Compliance - Glass Beads

The material covered by this Certification has been tested according to the standard procedures of Ennis-Flint Quality Control Department and complies with all applicable specifications.

Material Identification **Quantity**

Type: TTB 1325 Type I Gradation A **lbs:** 43,200
Lot: PL0219S0125

	TTB or FAA Type IA	
Micron	Sieve#	%Pass
850	20	100
600	30	80-100
300	50	18-35
150	100	0-10
75	200	0-2
Rounds: 80% overall		
Dual Coated		
EF Code: 651601		

Statement of Compliance:

I certify that the above listed item(s) meet the requirements as stated in the Material Identification section above. I hereby further certify that these beads are made using North American recycled soda lime glass cullet and meet the heavy metal specification set forth in Section 1504 of MAP-21.

Signature: *Alejandra Granados*
Title: Quality Assurance Lab Supervisor
Date: February 27, 2019

ENNIS-FLINT
A Traffic Safety Solutions Company

Certificate Of Analysis

Manufacturer:
Ennis-Flint
13213 Hwy 79 South
Saverton, MO 63467
Phone: 800-331-8118

Date:	4/9/2019
Code:	985222 TTP-1952-E Type III
Description:	WB YEL HI BUILD 1952F3 98PA30
Batch:	MP1904Y0131
Color:	YELLOW
Quantity:	1,490 Gallons
MFG Date:	4/9/2019

Property	UOM	Method	Min	Max	Actual
Total Solids	%	ASTM D2369			78.05
Pigment	%	ASTM D3723	60	62	60.28
Non-Volatile Vehicle	%				44.74
Weight	lbs./gallon	ASTM D1475			13.98
Viscosity	KU	ASTM D562	80	90	85
Fitness of dispersion, Hegman	Unit	ASTM D1210	3		4
Directional Reflectance (Y)	Unit	ASTM E97	50		53.52
Contrast Ratio @ 5 Wet Mils	Unit	ASTM D2805	0.92		0.929
Color Matches Fed Std. 33538	CIE				Pass
Dry Time (No-Pick-Up)	Minutes	ASTM D711		10	8
Bleeding Ratio	Units	ASTM D868	0.95		Pass
V.O.C. Less Than	grams/liter	ASTM D3960		100	Pass

I do hereby that the Ennis-Flint Traffic Paint accompanying this certificate complies with TTP-1952E Type III.

This product **does not** contain mercury, lead, hexavalent chromium, toluene, chlorinated solvents, hydrolyzable chlorine derivatives, ethylene based glycol ethers and their acetates, nor any carcinogen as defined in 29-CFR 1910.1200.

Name: *Thomas Elizondo*

Title: Quality Manager