

File No.: 04-1000-20-2018-243

June 11, 2018

s.22(1)

Dear s.22(1)

Re: **Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")**

I am responding to your request of April 25, 2018 for:

Regarding incidents on March 15, 2018 and March 16, 2018, involving coloured discharge floating in False Creek and the eventual determination that paint from the BC Place Stadium pitch was the source. Request is for the copies of the incident reports, briefing notes, MSDS for the substance (which is believed to have been TempLine Original by EcoChemical), photographs of the scene and the substance, and related correspondence.

All responsive records are attached. Some information in the records has been severed, (blacked out), under s.15(1)(l) of the Act. You can read or download this section here: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96165_00

Please note: the department involved in the collection of records for this request found no photographs of the scene or the substance in the files.

Under section 52 of the Act, and within 30 business days of receipt of this letter, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (#04-1000-20-2018-243); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.

Yours truly,

Cobi Falconer, FOI Case Manager, for

A handwritten signature in black ink, appearing to read 'Cobi', followed by a large, stylized flourish or second signature.

Barbara J. Van Fraassen, BA
Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4

*If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. Or you can call the FOI Case Manager at 604.871.6584.

Encl.

:ma

From: ["Elford, Douglas" <douglas.elford@vancouver.ca>](mailto:douglas.elford@vancouver.ca)

To: ["Ryan, Pat \ \(CBO\\)" <patrick.ryan@vancouver.ca>](mailto:patrick.ryan@vancouver.ca)

Date: 3/19/2018 12:58:52 PM

Subject: BC Place Stadium

Greetings, the Environmental Protection Branch and Sewer Operations responded to multiple outfall discharges on Thursday and Friday of last week into False Creek. We investigated and traced the discharge to a storm sewer plumbed into BC Place Stadium. The storm sewer collects all runoff from the artificial turf and drains right into False Creek. They irrigate the field regularly. It was determined that residual paint from the rugby sevens tournament was irrigated out the storm sewer. We have asked for drawings but it appears that this is the case. In order to mitigate this from happening again, we are recommending that BC Place intercept this runoff and divert it to the Sanitary Sewer system.

Contact me if you want any more information.

Doug Elford
Environmental Protection Officer
Environmental Protection
City of Vancouver
Real Estate and Facilities Management
604-873-7124

From: ["Felder, Rob" <Rob.Felder@vancouver.ca>](mailto:Rob.Felder@vancouver.ca)


To: ["Davis, Margot" <Margot.Davis@vancouver.ca>](mailto:Margot.Davis@vancouver.ca)
["Elford, Douglas" <douglas.elford@vancouver.ca>](mailto:douglas.elford@vancouver.ca)
["Roberge, Daniel" <Daniel.Roberge@vancouver.ca>](mailto:Daniel.Roberge@vancouver.ca)
["Todd, Bruce" <bruce.todd@vancouver.ca>](mailto:bruce.todd@vancouver.ca)
["Dhillon, Norm" <norm.dhillon@vancouver.ca>](mailto:norm.dhillon@vancouver.ca)
["Schwark, Mark" <mark.schwark@vancouver.ca>](mailto:mark.schwark@vancouver.ca)

Date: 3/16/2018 8:56:09 PM

Subject: Discharge in NE False Creek

Hi All,

I just got off the phone with Doug Elford, he has been informed by COV sewer maintenance personnel that there is currently a white discharge from the same outfall and manhole as last night. I just got off the phone with Brian Griffin from BC Place and he is to be used as the primary contact for BC Place

(Brian Griffin ^{s.15(1)(l)} ).

Margot and Doug, Brian is awaiting your call. Let me know if you need me to assist.

Thanks,

Rob

Sent from my iPhone

From: ["Griffin, Brian \ \(BC PAVCO\)" <BGRIFFIN@bcpavco.com>](mailto:BGRIFFIN@bcpavco.com)

To: ["Felder, Rob" <Rob.Felder@vancouver.ca>](mailto:Rob.Felder@vancouver.ca)

Date: 3/16/2018 8:13:43 AM

Subject: FW: Message from BCPLACE-OP-COPIER2

Attachments: SBCPLACE-OP18031608090.pdf

MSDS sheets as requested

From: Brian Griffin

Sent: Friday, March 16, 2018 8:10 AM

To: Brian Griffin <BGRIFFIN@bcpavco.com>

Subject: Message from BCPLACE-OP-COPIER2

MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union standards



1. PRODUCT IDENTIFICATION

<u>TRADE NAME (AS LABELED):</u>	TempLine Original (Clear, White & Various
<u>Colors) SYNONYMS:</u>	Water Based
<u>Paint MANUFACTURER'S NAME:</u>	ECO Chemical, Inc.
<u>ADDRESS:</u>	6600 Ursula Pl So Seattle, WA 98108
<u>BUSINESS PHONE:</u>	(206) 448-7930
<u>EMERGENCY PHONE:</u>	(206) 448-7930
<u>DATE ISSUED:</u>	January 7, 2014
<u>PREVIOUS REVISION DATE:</u>	January 7, 2011

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: **Product Description:** This product is a clear, white or colored liquid, with characteristic odor. **Health Hazards:** Prolong contact may cause irritation to skin and eyes. Ingestion may cause gastrointestinal irritation. **Flammability Hazards:** Non-Flammable aqueous solution. **Reactivity Hazards:** None. **Environmental Hazards:** Not expected to have significant environmental effects. **Emergency Considerations:** Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

EU LABELING AND CLASSIFICATION: This product meets the definition of a hazardous substance or preparation according to EU Regulations (EC) No 1272/2008.

INDEX NUMBER:

None of the substances below are listed in the Annex I of Regulation (EC) No 689/2008.

EU

CLASSIFICATION:

Classification:

None Risk Phrases:

None

Safety Phrases: S37/39: Wear suitable gloves and eye/face protection. Annex II Hazard Symbol: None

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

Acute	Prolonged contact with this product may be irritating to eyes and skin. Maybe harmful if swallowed.
Chronic	None known at this time.

MATERIAL SAFETY DATA SHEET

3. COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
P(EA/MAA)	25212-88-8	Not Listed	Not Listed	<5%	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Polymer	Not Listed	Not Listed	Not Listed	<15%	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Titanium Dioxide	13463-67-7	236-675-5	0338	0 – 10%	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Proprietary Polymer	9063-87-0	Exempt	Not Listed	0 – 2%	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Non-Hazardous Colorant	Non-Hazardous	Not Listed	Not Listed	0 – 1%	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Water	7732-18-5	231-791-2	Not Listed	Balance	HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE
Balance of water and other components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens)					HAZARD CLASSIFICATION: NOT CLASSIFIED RISK PHRASES: NONE

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000.

See Section 2 for full text of Ingredient Risk Phrases and Safety Phrases

4. FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EYE CONTACT: If product is in eyes, open victim's eyes while under gentle running water. Use sufficient force to open eyelids. Minimum flushing is for 15 minutes. Remove contact lenses, if worn. Seek medical attention if irritation persists.

SKIN CONTACT: Wash contacted area with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if irritation develops and persists.

INHALATION: If chemical is inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: Routine use of this product is not expected to cause any situation which could lead to ingestion. If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: Non-Flammable

AUTOIGNITION TEMPERATURE: Not established

FLAMMABLE LIMITS (in air by volume, %): Lower NE Upper NE

FIRE EXTINGUISHING MATERIALS: Carbon dioxide, foam, dry chemical, halon, water fog.

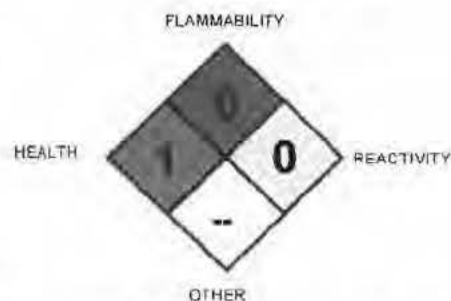
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

Explosion Sensitivity to Mechanical Impact: Not Sensitive

Explosion Sensitivity to Static Discharge: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING



Hazard Scale: 0 = Minimal 1 = Slight
2 = Moderate
3 = Serious 4 = Severe

MATERIAL SAFETY DATA SHEET

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Proper protective equipment should be used.

SPILLS: Absorb spilled material using polypads or other suitable absorbent material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Wash thoroughly after handling this product. Use in a well-ventilated location. Remove contaminated clothing.

STORAGE AND HANDLING PRACTICES: Keep this and other chemicals out of the reach of children. Store product in properly labeled, closed containers in cool, dry location, away from incompatible materials. Protect from physical damage. Keep containers closed when not in use.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation.

EXPOSURE LIMITS/GUIDELINES:

<u>Chemical Name</u>	<u>CAS#</u>	<u>ACGIH-TLV's</u>	<u>OSHA PEL's</u>	<u>NIOSH-TLV's</u>	<u>Other</u>
P(EA/MAA)	25212-88-8	Not Listed	Not Listed	Not Listed	None
Polymer	Not Listed	Not Listed	Not Listed	Not Listed	None
Titanium Dioxide	13463-67-7	10 mg/m ³	15 mg/m ³	Not Listed	None
Proprietary Polymer	9063-87-0	Not Listed	Not Listed	Not Listed	None

Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: May be required if not able to maintain exposure levels. If exposure limits are exceeded, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Recommended for normal handling and use. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves should be worn for normal handling and use. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Wear as appropriate for the application. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Solid

VAPOR DENSITY: >1

SPECIFIC GRAVITY: 1.136 (water=1)

VAPOR PRESSURE: 17 mm Hg @20°C

APPEARANCE, ODOR and COLOR: This product is a clear, white or colored liquid, with characteristic odor.

COLOR: Material Dependent

EVAPORATION RATE (n-BuAc=1): <1

SOLUBILITY IN WATER: Disperses

pH: 8.5 – 9.5

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10. STABILITY and REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage

DECOMPOSITION PRODUCTS: Oxides of carbon, hydrocarbons, fumes or vapors and smoke may form when heated to decomposition.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizers and strong acids.

HAZARDOUS DEPOLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

No Data

SUSPECTED CANCER AGENT: The components of this product are not listed by agencies tracking the carcinogenic potential of chemical compounds as follows:

Carcinogenity

NTP Regulated No

IARC Regulated No

OSHA Regulated No

IRRITANCY OF PRODUCT: Airborne mists of this product can irritate eyes.

SENSITIZATION TO THE PRODUCT: This product will not cause human skin or respiratory sensitization.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in

humans. **Embryotoxicity:** The components of this product are not reported to produce embryotoxic effects in

humans. **Teratogenicity:** The components of this product are not reported to produce teratogenicity effects in

humans. **Reproductive Toxicity:** The components of this product are not reported to produce reproductive effects in humans

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY IN SOIL: These products have not been tested for mobility in soil.

PERSISTENCE/DEGRADABILITY: These products have not been tested for persistence or biodegradability. The components may slowly degrade in the environment and form a variety of organic and inorganic materials; however, no specific information is known.

ENVIRONMENTAL STABILITY: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways

BIOACCUMULATION/ACCUMULATION: These products have not been tested for bio-accumulation potential.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

DOT CLASSIFICATION Non-Regulated Material

DOT LABELING REQUIREMENTS None

IATA LABELING REQUIREMENTS None

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.

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EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD
(ADR): This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

SARA REPORTING None

REQUIREMENTS

MARINE POLLUTANT This product contains no component listed as a Marine Pollutant under 49 CFR 172.101, Appendix B.

TSCA All components in this product mixture are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312: Acute Health: Yes; Chronic Health: No; Fire: No; Reactivity: No

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: All of the components of this product are not listed in the TSCA Inventory.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain any component above the 0.1% level which is listed as a California Proposition 65 chemical.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Not controlled

EUROPEAN ECONOMIC COMMUNITY

INFORMATION: Classification: None

Risk Phrases: None

Safety Phrases: S37/39: Wear suitable gloves and eye/face protection. Annex II Hazard Symbol: None

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftlist List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Paul Eigbrett

MSDS Authoring PLUS

DATE OF PRINTING: January 13, 2014

All chemicals may pose unknown hazards and should be used with cautions. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, ECO Chemical, Inc assumes no responsibility for the completeness or accuracy of the information contained herein. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment

From: ["Griffin, Brian \ \(BC PAVCO\\)" <BGRIFFIN@bcpavco.com>](mailto:BGRIFFIN@bcpavco.com)
To: ["Elford, Douglas" <douglas.elford@vancouver.ca>](mailto:douglas.elford@vancouver.ca)
Date: 3/28/2018 8:00:28 AM
Subject: Meeting with Engineer

We met yesterday with a mechanical engineering firm and looked at great detail into the entire system here. They have been provided with all of our drawings and now will go away and come back with suggestions on how this system can be improved. I will keep you up to date.

Brian Griffin

Director, Facility Operations



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P.604 669 2300	Vancouver, BC
W. www.bcplace.com	Canada V6B 4Y8

BC Place is a Division of PavCo, a Crown Corporation of the Province of British Columbia

From: ["Davis, Margot" <Margot.Davis@vancouver.ca>](mailto:Margot.Davis@vancouver.ca)
To: ["Elford, Douglas" <douglas.elford@vancouver.ca>](mailto:douglas.elford@vancouver.ca)
["Iacoe, Christiaan" <Christiaan.Iacoe@vancouver.ca>](mailto:Christiaan.Iacoe@vancouver.ca)
Date: 3/16/2018 6:26:09 PM
Subject: RE: 811 Carrall Street - VI 12179.docx

Thanks Doug,

As noted, appreciate the effort you made in responding to this incident!

For the Incident Report, can you please include the following information:

- ☐ time when the decanting of the material began and ended
- ☐ time when the response action was complete
- ☐ record of environmental observations during the response (e.g., periodic inspections were made to the shoreline ??? and add results; also specifically, add the time of the last time that you went and what observations were made – this bookends the environmental observations)
- ☐ comment on mitigation measures (e.g., redirect flow, contain flow, decant flow, etc.) feasibility assessments that was done before source was identified
- ☐ add time of any additional calls that you made to the regulatory agencies (I made 3 calls to them so it isn't a concern if you didn't call; just wanted to make sure your Incident Report includes this information if you did)
- ☐ add contact information for the BC Packer representatives and how they were advised that they had an unlawful discharge
- ☐ change GM Place to Roger's Arena; also didn't you go to the film staging area in the parking lot nearby – if so, could you please add
- ☐ for cost-recovery:
 - add that Environment will provide cost expenditures to Engineering (can you please start putting costs together for our time/role)
 - add the person/title in sewers who will be recouping costs
- ☐ for the follow-up action section beyond cost-recovery, can you add:
 - who is following up to make sure all infrastructure needs are in place (e.g., interceptors, etc.) and practices are changed so we don't encounter this again (do we need to send a letter?, request that the engage an environmental professional to comment on level of risk posed and review/demonstrate that remedial/preventative measures have been put in place, etc.) – I do see this as our role but please advise of your thoughts
 - indicate that you will be coordinating a debrief to review how the incident response went (so we can build on our strengths and see where we can improve)
 - indicate that Environment Services will, in coordination with Fire and Engineering, be preparing a Complete Incident Response Summary (I can assist with this first one and then send your way to review/complete)
 - anything else?

Thanks,
Margot

From: Elford, Douglas
Sent: Friday, March 16, 2018 1:03 PM
To: Iacoe, Christiaan; Davis, Margot
Cc: Prescott, Lisa
Subject: 811 Carrall Street - VI 12179.docx

Here is my report on the Outfall spill in False Creek last night.

Doug Elford
Environmental Protection Officer
Environmental Protection
City of Vancouver

From: ["Luis, Al"](#)
To: ["Davis, Margot" <Margot.Davis@vancouver.ca>](#)
Date: 3/17/2018 11:13:16 AM
Subject: Re: Discharge in NE False Creek

Good morning all,

Just a quick update to last night, the City crew and McRae's crew worked until around 3:00am. They flushed the storm sewer and cleaned as much as possible. Moving forward we need to ensure that BC Place find an alternate solution to how they clean the fields.

If something is to come up I will send out another email to the group.

Regards and enjoy your sunny Saturday,

Al Luis

Sent from my iPhone

On Mar 16, 2018, at 10:37 PM, Davis, Margot <Margot.Davis@vancouver.ca> wrote:

Thanks so much Al,

Just adding to all that required reporting to the Province has been done and will update once the cleanup is complete.

Brian, Director of Facility Operations, at BC Place has also advised that no water is scheduled to be used over the next couple of weeks (this is a second discharge following the discharge from yesterday that came from BC Place) and that they will be reviewing connections/practices and advise the City. As such, we are hopeful that there won't be anything in the future.

Thanks,
Margot

Sent from my iPhone

On Mar 16, 2018, at 10:16 PM, Luis, Al <al.luis@vancouver.ca> wrote:

Good evening all,

[At around 8:00pm](#) I received a call from the afternoon shift crew, they were called out for a similar issue as last night there was a white substance discharging into False Creek. The crew have been in contact with someone from BC Place stadium Sewer Sep and Environmental Protection and are in the process of cleaning the Sewer again. There isn't any work being done at the Stadium currently. The contact maintenance person from the

Stadium has contact McRea's Environmental and hired a Hydro-Vac to start flushing the mains around the stadium. the afternoon shift will stay and supervise the clean up and report to me once completed.

I asked them if they needed more support and was told that at this time they don't need any.

I will send an update email [tomorrow morning](#) once I get updated from the crew.

Regards,

Al Luis

Sent from my iPhone

On Mar 16, 2018, at 8:28 AM, Felder, Rob <Rob.Felder@vancouver.ca> wrote:

Please see the attached MSDS, just received from Brian Griffin at BC Place.

Thanks,

Rob Felder
Coordinator Engineering Services
Inspections / Sewer Separation
City of Vancouver
Tel: 604 873 7889
Cel: 604 603 2275
rob.felder@vancouver.ca

From: Dhillon, Norm
Sent: Friday, March 16, 2018 1:31 AM
To: Roberge, Daniel; Elford, Douglas
Cc: Davis, Margot; Felder, Rob; Schwark, Mark; Todd, Bruce; Konowalchuk, Wally; Bailey, Derek; Dobrovolny, Jerry; Nelms, Cheryl; Luis, Al
Subject: RE: Discharge in NE False Creek

Hi All,

UPDATE: Pink Discharge into NE False Creek

At approximately 9:45 pm Mar 15/2018 Sewer Operations, Sewer Separation and REFM Environmental Staff met on site at the outfall to False Creek South of Carrall and Pacific Blvd (just east of the former Edgewater casino). We observed a pink paint like substance flowing out of the outfall to False Creek which then quickly dissipated upon reaching the mouth of the outfall with little residual making contact on the shoreline.

Containment at this time was difficult so we focused on locating the source of the inflow. Rob Felder began by having the sewer operations crew conduct a survey of all manholes leading away from the outfall and then proceeded to lead us through an inspection of Rogers Arena with building Operator Chris Howat which came up negative. Upon completion of our inspection of Rogers arena, Sewer Ops staff contacted Rob indicating they located a manhole being fed from BC Place which had a large amount of the pink coloured contaminant similar to what was found at the outfall.

We then proceeded to contact the Duty Manager on shift to request an inspection of some of their sumps which they allowed, upon opening the first manhole it was apparent the source of the pink

residual was BC Place. It was soon learned that the source of the pink colour was caused by maintenance crews washing out the HSBC Rugby 7 tournament red and white logos. The washing was done with a few commercial grade high capacity pulsating sprinklers over several hours which by the time we arrived had been just shut down.

Rob notified the Duty Manager of what has taken place and that Doug's group will be following up with them Friday (March 16, 2018). BC Place was also informed to cease all sprinkling until we have an MSDS sheet made available and a plan in place to ensure no contaminates get into any sensitive waterbodies.

On our return to survey the manholes on Pacific Blvd we had found that due to the tide coming in the Manhole's and Storm line were now acting as a retention tank for the pink paint. At the request of Environmental Protection they requested we decant all the material which was now contained to ensure that as the tide goes out people are not again alarmed by the site the pink residual in the morning.

The Sewer Operations crew will remain on-site to decant the containment with a Hydro-vac for next couple of hours until they are confident that a bulk of the pink material has been removed.

Thank you

Norm Dhillon

From: Roberge, Daniel

Sent: Thursday, March 15, 2018 9:40 PM

To: Elford, Douglas

Cc: Davis, Margot; Felder, Rob; Schwark, Mark; Dhillon, Norm; Todd, Bruce; Konowalchuk, Wally; Bailey, Derek

Subject: Re: Discharge in NE False Creek

Speculations it may be from Rogers arena... more to come

Sent from my iPhone

On Mar 15, 2018, at 9:26 PM, Elford, Douglas <douglas.elford@vancouver.ca> wrote:

The outfall is located northeast of the old BC Pavillion. Old metal culvert discharging a pinkish coloured liquid. Very little odour and neutral on the litmus test. Sewers is assisting the investigation.

Sent from my iPhone

On Mar 15, 2018, at 8:19 PM, Davis, Margot <Margot.Davis@vancouver.ca> wrote:

Doug Elford is on route to site and will take pictures.

Is there a way if discharge is still active to vacuum material out before it is discharged?

Sent from my iPhone

On Mar 15, 2018, at 7:09 PM, Roberge, Daniel <Daniel.Roberge@vancouver.ca> wrote:

Are there pictures available to assist in tracking the source?

Sent from my iPhone

On Mar 15, 2018, at 6:37 PM, Felder, Rob <Rob.Felder@vancouver.ca> wrote:

Please send me the posted photograph so that the catchment area can be identified.
I will assign a team to attempt to track the source first thing in the morning.

Thanks,

Rob
Sent from my iPhone

On Mar 15, 2018, at 6:30 PM, Roberge, Daniel <Daniel.Roberge@vancouver.ca> wrote:

Does anyone know anything about this?

Sent from my iPhone

Begin forwarded message:

From: "Dobrovolny, Jerry" <jerry.dobrovolny@vancouver.ca>
Date: March 15, 2018 at 5:12:02 PM PDT
To: "Roberge, Daniel" <Daniel.Roberge@vancouver.ca>
Cc: "Nelms, Cheryl" <Cheryl.Nelms@vancouver.ca>, "Scholefield, Melina" <Melina.Scholefield@vancouver.ca>
Subject: Fwd: Discharge in NE False Creek

Daniel

Are you guys involved as well?

Thanks

Jerry

Sent from my iPhone

Begin forwarded message:

From: "Aujla, Bill" <bill.ujla@vancouver.ca>
Date: March 15, 2018 at 5:45:02 PM CST
To: "Johnston, Sadhu" <Sadhu.Johnston@vancouver.ca>, "Dobrovolny, Jerry" <jerry.dobrovolny@vancouver.ca>, "Bartlett, Robert" <Robert.Bartlett@vancouver.ca>, "Kendall-Craden, Rena" <Rena.Kendall-Craden@vancouver.ca>
Cc: "Davis, Margot" <Margot.Davis@vancouver.ca>, "Prescott, Lisa" <Lisa.Prescott@vancouver.ca>
Subject: Discharge in NE False Creek

Just when we are addressing the PNE discharge, discharge into NEFC was identified ... Margot's team is investigating, and she notes the following:

- there was a pink discharge flowing into NE False Creek; there is no current discharge now
- Environmental Services attended and found that discharge has stopped
- material is non-recoverable and rapidly dissipating
- Environmental Services is still on-site and investigating if source can be identified; we will be advising regulatory agencies
- photo has been posted by a community member on Twitter;

Global News is also aware (PNE informed us as they were in touch with Global News regarding their recent incident and Global News mentioned it to them).

This is all we know at the moment but will advise if we find out anything further.

<SBCPLACE-OP18031608090.pdf>

From: ["Griffin, Brian \ \(BC PAVCO\)" <BGRIFFIN@bcpavco.com>](mailto:BGRIFFIN@bcpavco.com)

To: ["Elford, Douglas" <douglas.elford@vancouver.ca>](mailto:douglas.elford@vancouver.ca)

Date: 4/27/2018 6:18:22 PM

Subject: Re: Meeting with Engineer

We have a civil engineer working on it and will advise when we have a solution

Sent from my iPhone

On Apr 27, 2018, at 3:58 PM, Elford, Douglas <douglas.elford@vancouver.ca> wrote:

Please provide an update regarding the issue of your drainage system.

Thanks

Doug Elford
Environmental Protection Officer
Environmental Protection
City of Vancouver
Real Estate and Facilities Management
604-873-7124

From: Griffin, Brian (BC PAVCO)
Sent: Wednesday, March 28, 2018 8:00 AM
To: Elford, Douglas
Subject: Meeting with Engineer

We met yesterday with a mechanical engineering firm and looked at great detail into the entire system here. They have been provided with all of our drawings and now will go away and come back with suggestions on how this system can be improved. I will keep you up to date.

Brian Griffin

Director, Facility Operations

[<image003.png>](#)

D.604 661 3447	777 Pacific Blvd
P.604 669 2300	Vancouver, BC
W. www.bcplace.com	Canada V6B 4Y8

BC Place is a Division of PavCo, a Crown Corporation of the Province of British Columbia





IR Number	VI 12179	EN Number		Date of Inspection	2018/03/15/16
Main Address	811 Carrall Street	Specifics and/or Suite #	Storm Sewer Outfall		
Secondary Address	750 Pacific Boulevard				
Tenant	City of Vancouver	Contact Phone #	s.15(1)(l)		
Owner	City of Vancouver	Permit Number			
Contractor	Brian Griffen (BC Place) Colleen Gamble (Duty Manager)	Present Use of Building/Land			

Reason for Inspection Lagen Case # 10101993168

Narrative/Observations

Received the first page on this call at approximately 3:00 pm. Thursday evening. A pinkish discharge was described coming out of an outfall northeast of the BC Place Pavilion. I arrived and met with the Fire Department. They had paged us after they were called out to investigate. There was a paint-like material coming out of the outfall. The outfall was under water due to the tide but you could see the swirling of the discharge and the pink material at that point. It appeared to be dissipating as it entered the creek. It was not clinging to the rocks and appeared to be water soluble. There was no noticeable odour at the time. I toured the area looking for obvious points of discharge but could not find anything out of the ordinary. Once I returned to the outfall, the discharge had ceased. I had planned to discuss with Sewer Separation the next day and recommend we initiate surveys.

I contacted Coast Guard and informed them of the incident. I received a call from National Yards dispatch asking if I needed assistance at the time. I said we were standing down as the discharge had ceased.

7 pm. Environmental Protection was paged again on the same lagen case. The agent said that they were getting repeat calls of the same material discharging at the same point again. I contacted Streets Emergency to request an initial observation and they reported back that they could not see anything. In discussion with my manager, Margot Davis we determined that this required an inspection. I arrived at approximately 7:45 pm. There was a significant amount of material coming from the outfall. The outfall is part of a natural drainage system and flows consistently even in dry weather. It had the same characteristics as the material observed earlier in the day. I took a sample and checked for pH. It was neutral. There was no odor. The tide was very low so I suspected the material was suspended in the system due to sewer surcharging and was exiting now at lower tides. I called Dispatch and requested a sewer crew to attempt a trace as it was still flowing. I contacted Margot Davis. I contacted EMBC and they said they already had a report from a citizen. I received a call from Norm Dhillon the acting Sewer Operations Manager and he said he would attend. I was contacted by Rob Felder of Sewer Separation and he said he would be attending the site. Sewer Operations attended first and we began a preliminary survey of the sewer system in the area. It was determined that the outfall affected was a natural stream and that there was no option for diversion of the discharge. We investigated the Film staging area in the parking lot just north of the outfall and found no evidence of liquid discharge on the site. There was no evidence of a discharge from the first set of manholes surveyed.

Mr. Dhillon and Mr. Felder arrived and we began an inside survey of the surrounding buildings. The Sewer Operations Crew continued with the outside survey of the surrounding system. One of the buildings was Rogers Arena. We toured the plant and found no evidence of material inside entering into the storm sewer system. We met with the sewer crew outside and they indicated that they had discovered the same material in a storm sewer. It was suspected that the source was BC Place. We entered BC Place and met with some staff. There was a movie shoot ongoing but no wet waste. Sewers then indicated that they spotted the same material in a manhole just outside BC Place building. We opened the manhole and there the evidence of the same material in the sewer system. The maintenance manager of BC Place said that the source of the material in the sewer is likely from the red painted logo that was recently removed on the artificial turf due to the Rugby Sevens Tournament. They had just finished irrigating the field after the event and that is the cause of the reddish pink discharge. All the drainage runs straight out to the storm sewer. It appears as if there is no interception of the

IR Number VI 12179

EN Number

Date of Inspection (2018//03/15) 2018/03/15/16

runoff. Rob Felder asked for the MSDS and mechanical drawings from Mr. Griffen the manager of GM Place. It was determined that a vacuuming of the storm line from the BC Place Manhole to the next one downstream would eliminate a majority of the product in the system. Sewers contacted McRae's Environmental Waste management to attend the site and vacuum the storm sewer. Mr Dhillon said he would update the City on the findings. At this point we stood down from our investigation. I conducted one last inspection of the shoreline and the material was dissolving as it entered the creek and it was hard to get a proper observation due to the darkness. The Sewer Operations crew reported that McRae's got most of the material out of the system. They were off the site at approximately 4:30 am. It was advantageous timing due to the fact that the material had remained in the system due to the tidal surcharge at the time.

Requirements

Sewer ops to bill BC Place for the costs of the cleanup. Al Luis and Norm Dhillon of Sewer Operations will be recouping costs on this investigation.

Recommendations

BC Place ensure that the runoff from the irrigation of the artificial turf be intercepted and redirected to the City of Vancouver Sanitary Sewer system.

Phil White of Plumbing Inspections has been notified regarding the implementation of the mitigation process which includes Environmental Protection recommendations of interception of the runoff and diversion to the Sanitary Sewer System.

Conduct a debrief to discuss the incident response

Photos Taken? ☒ Yes ☐ No

Notice Posted? ☐ Yes ☐ No Type of Notice?

Date Report Made: March 16, 2018

Douglas Elford
Inspector's Name

For Manager or Supervisor Use Only

File: ☐ Approval / Use ☐ Enforcement ☐ Project / Permit

FYA to:


FYI to:

Manager / Supervisor

Work Slip

SAP Charge #	Address & Location:				Responsible	
	750 Pacific Blvd				Sewer Operations	
Work Order #	Work Order Activity				Created Date	
	Investigation					
Group Project #	Problem	Sub Activity	Assigned To		Crew ID	
					40	
Work Order Comments:						
Reference #1						Billable?
Reference #2						
Service Request #:						
Contact Name			Contact Phone		Contact Type	
Asset Type	Asset ID #	B.U.N	Status	Asset Area	Map # (Facet)	District
Asset Details:						
Safety & Asset Notes:						
PM Schedule	Last Completed Work Order					
Crew Comments						
<p>CHECKED ON OUTFALL FROM PREVIOUS NIGHT AND FOUND WHITE COLOUR COMING FROM OUTFALL. WE TRACE WHITE COLOUR BACK TO B.C. PLACE AND WENT INSIDE WITH SECURITY. THE FIELD WAS NOT WET LIKE THE PREVIOUS NIGHT BUT IT LOOKED LIKE THE HAD RINSED DOWN A SECTION OF BLEACHERS. WE FOLLOWED THE STM MAIN WEST OF B.C. PLACE TO CHECK FOR MORE WHITE COLOURING IN THE STM MAINS BUT DID NOT SEE ANY. WORKED WITH MCRAES AND PUMPED DOWN STM MAIN AND FLUSHED OUTFALL.</p>						
Work Completed Date: March 16 2018			Print Name: C. MALONEY			Crew ID: 40

Work Slip

SAP Charge #	Address & Location:				Responsible	
	750 PACIFIC BLVD				Sewer Operations	
Work Order #	Work Order Activity				Created Date	
	Investigation					
Group Project #	Problem	Sub Activity	Assigned To		Crew ID	
					40	
Work Order Comments:						
Reference #1						Billable?
Reference #2						
Service Request #:	1262436					
Contact Name			Contact Phone		Contact Type	
Asset Type	Asset ID #	B.U.N	Status	Asset Area	Map # (Facet)	District
Asset Details:						
Safety & Asset Notes:						
PM Schedule	Last Completed Work Order					
Crew Comments						
<p>Job Complete</p> <p>PINK WATER COMING FROM</p> <p>OUTFALL TRACED BACK TO</p> <p>B.C. PLACE.</p> <p>COLOUR FROM FIELD WAS BEING WASHED</p> <p>AFTER A RUGBY GAME.</p> 						
Work Completed Date: March 15 2018			Print Name: C. MALONEY			Crew ID: 40

March 26, 2018

Mr. Brian Griffin
Director Facility Operations
BC Place
777 Pacific Boulevard
Vancouver, B.C. V6B 4Y8

Dear Mr. Griffin:

RE: Violation of the City of Vancouver Sewer Use Bylaw No. 8093

As you are aware, the City of Vancouver (the City) responded on March 15, 2018 to a complaint of "pink liquid" observed exiting a storm sewer outfall into False Creek. An investigation determined the source of the discharge to originate from BC Place Stadium. Wastewater runoff from the irrigation of the artificial turf within the building combined with residual paint was identified as the source of the discharge.

On March 16, 2018, the City's follow-up monitoring found that a white discharge was exiting from the same storm sewer outfall into False Creek and that the source of the discharge also originated from BC Place Stadium. Wastewater runoff from the irrigation of the artificial turf with residual paint was again identified as the source of the discharge.

Discharges of water containing paint into the City's storm sewer are a violation of the City of Vancouver Sewer and Watercourse Bylaw No. 8093. Section 3.2 (2) (D) of this Bylaw states that, "No person shall, directly or indirectly, place or discharge or cause to be placed or discharged into the storm drainage system or any watercourse any water having the following characteristics: chemicals, chemicals residues, paint, paint residues." According to the Bylaw, no water, other than natural rainwater, is allowed to enter into the City's storm sewer system.

It is understood that BC Place is undertaking a full investigation on how these incidents occurred and implementing remedial measures to ensure that there are no future discharges to the storm sewer system. It is also understood that a report, prepared by a qualified environmental professional, will be provided to the City. This report will provide a description of the incident, findings of the subsequent source investigation and action taken to prevent any future incident. The report, or an update on the report progress, will be provided to the

bcplaceletter (3)_MD.docx

City by May 4th, 2018. Please be advised that the City will be seeking reimbursement for municipal costs incurred in responding the two incidents.

The City appreciates BC Place's attention and action to resolving the discharges. Failure to fulfill responsibilities may result in enforcement action being taken under the bylaw. Unlawful discharges to the environment are also subject to prosecution under federal and provincial legislation.

If you have any questions, please contact myself or contact Douglas Elford at 604-873-7124 or by email at douglas.elford@vancouver.ca

Yours truly,

Margot Davis
Manager, Environmental Services
507 West Broadway, Vancouver, BC V5Z 1E6
tel: 604.873.-7116

MD/