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File name 文件名	Environmental Waste Leakage Control Instruction 环境废弃物异常泄漏处置操作指引	

Approval process

审批过程

	Name 姓名	Title 职务	Signature 签名	Date 日期
Drafted by 起草人	Xu Guangxiang 许光祥	EHS Officer		
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Approved by 批准人		Campus Safety Committee;		

Reversion records

版本历史记录

Rev. No. 版本号	Publication date 出版日期	Rev. reason/ content modified 再版原因/更改内容
01	2020-02-10	New file 新建文件

Relevant departments (select relevant departments with a “√”)

相关部门 (用√勾选相关部门)

Construction Dept. 校园建设部	√	Operation Dept. 校园运营部	√	H.R. Dept. 人力资源部	√
RIGS 研究创新和研 生部	√	U.G. Dept. 本科教学部	√	I.T.Dept. 电脑信息部	√

Relevant documents 相关文件

No无

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1. Purpose 目的

In order to control the environmental anomalies in the school in a timely and effective manner, reduce the damage caused by environmental accidents, prevent the deterioration of the incident, and minimize the environmental losses, this management procedure is specially formulated.

为及时有效地控制学校内环境异常事件，减轻因环境事故造成的损害、防止事件恶化、以及最大限度降低环境损失，特制定本管理程序。

2. Scope 范围

The provisions of this document apply to all relevant waste spill disposal operations at the GTIIT.

本文件规定适用于广东以色列理工学院所有相关的废弃物泄漏处置操作。

3. Responsibility 职责

EHS Office EHS办公室：

- Responsible for the modification of this procedure and the guidance and treatment of environmental protection anomalies;
负责本程序的修改及环保异常情况的指导处理；
- Assist the school operation department to count the equipment and facilities that may have waste leakage in the school, and make a list for the operation department to follow up.
协助校运营部统计校内存在废弃物泄露可能的设备设施，并列清单供运营部跟进。

Campus Operations Department-Waste Transfer and Management 校园运营部-废弃物转运及管理：

- Responsible for the preventive measures and regular maintenance of all equipment and facilities in the school that may cause leakage accidents;
负责对学校内所有可能导致发生泄漏事故的设备、设施进行预防泄漏的预防措施和定期的维护保养工作；
- Responsible for organizing and coordinating the handling of environmental anomalies and subsequent improvement.
负责组织协调环境异常事件处置和事后改善工作。

Person in charge of each laboratory 各实验室负责人：

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- Responsible for the state supervision of environmental protection equipment and facilities, waste temporary storage facilities and tools in their respective laboratory areas, and assistance for abnormal handling.

负责各自实验室区域环保设备设施、废弃物暂存设备设施、工具的状态监督及异常协助处理。

4. Terminology 术语

- Liquid waste:** mainly refers to liquid waste that is harmful to people or the environment, including high concentration liquid waste acid, waste alkali, organic waste liquid and other laboratory waste liquid.

液体废弃物：主要是指对人或环境有害的液体废弃物，其中包括高浓度液态的废酸、废碱、有机废液等实验室废液。

- Solid waste:** mainly refers to the hazardous waste that meets the definition of the National Hazardous Waste List, which includes the following two characteristics:
 - It has one or more dangerous characteristics such as corrosiveness, toxicity, flammability, reactivity or infectivity;
 - It is not excluded that it has hazardous properties that may cause harmful effects on the environment or human health, and needs to be managed in accordance with hazardous waste.

固体废弃物：主要是指符合《国家危险废物名录》定义的危险废物，其中包含以下两种特性：

- 具有腐蚀性、毒性、易燃性、反应性或者感染性等多种危险特性的；
- 不排除具有危险特性，可能对环境或者人体健康造成有害影响，需要按照危险废物进行管理的。

- Dust:** refers to solid particles suspended in the air. The International Organization for Standardization specifies that solid suspended solids with a particle size of less than 75 μm are defined as dust.

粉尘：是指悬浮在空气中的固体微粒。[国际标准化组织](#)规定，粒径小于75μm的固体悬浮物定义为粉尘。

- Harmful gas:** refers to the gas that has an adverse effect on human or animal health through experimental process equipment or environmental equipment, or that has no effect on human and animal health, but can make people or animals feel uncomfortable and affect the comfort of people or animals Such as NH₃, H₂S and CO.

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有害气体：是指通过实验过程设备或环境设备产生对人或动物健康不利影响，或者说对人和动物健康虽无影响，却能让人或动物感到不适，影响人或动物舒适度的气体，如NH₃、H₂S和CO等。

- **The wastewater treatment station is abnormal:** After the experimental sewage and wastewater in the school are treated by the special collection and treatment equipment in the school, they meet the corresponding discharge standards for wastewater discharge, but the equipment is in an abnormal state and cannot operate normally.

废水处理站异常：校内实验污水和废水经校内专用收集和处理设备处理后，达到相应污水排放要求排放标准，但设备处于异常情况无法正常运行的状态。

5. Environmental waste abnormal leakage disposal process 环境废弃物异常泄漏处置流程

5.1. Principles for dealing with environmental waste spill emergencies 处理环境废弃物泄漏紧急情况的原则：

- In the case of personnel rescue, the rescue of victims and injured persons must be the first priority to reduce casualties;
如涉及人员救援，则必须以营救受害者和受伤人员为先，减少人员的伤亡；
- Reduce damage to property, environment and school interests;
减少财产、环境和学校利益的损害；
- Protect the affected areas, ensure the safety of environmental equipment and facilities and resume normal operation as soon as possible
保护受影响区域，确保环境设备设施安全并能尽快恢复正常运行；
- Keep all records and equipment related to the incident to ensure an effective investigation of the incident;
保存与事件有关的所有记录和设备，以确保对事故的有效调查；
- Make every effort to ensure that controls are leaked within the school.
尽力确保控制泄露在学校范围内。

5.2. Liquid waste leakage treatment (including laboratory, waste storage area but not limited to these two locations) 液体废弃物泄漏处理（包含实验室、废弃物暂存区但不仅限于此两位置）

5.2.1. Report 报告

- If the leaked liquid has flowed into the school's water body, it should be reported immediately to the school's EHS and the district director;
如泄漏液体已流入校内水体，应立即报告校EHS及区域负责人；

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- If the leaked liquid has flowed off-campus into a water body or a municipal pipeline, it should be reported immediately to the local environmental supervision department.
如泄漏液体已流入校外进入水体或市政管道，应立即电话报告当地环保监督部门。

5.2.2. On-site disposal and control 现场处置与控制

- When all liquid leaks occur, while ensuring personal safety, the source of the leak should be closed or cut off immediately to control the expansion and increase of leaks;
发生所有液体泄漏时，在保证个人人身安全同时，应立即关闭或切断泄漏源头，控制泄漏物的扩大及增加；
- Isolate the site to prevent unrelated personnel from entering the processing site;
对现场进行隔离围闭，防止无关人员进入处理现场；
- When a general waste liquid leak occurs, the leak is inside the cofferdam. Use a leak-proof tool and follow the school's chemical spill emergency operation guidelines to contain and clean up the spill;
发生一般废弃液体泄漏时，泄漏在围堰以内，使用防泄漏工具，按照学校化学品泄漏应急操作指引，将泄漏物进行围堵清理；
- When the waste liquid leaks into the rainwater pipe network, immediately close the school rainwater main outlet valve and open the accident pool valve. At the same time, use clean water at the front end to flush the leakage into the accident pool for collection and return to the school wastewater treatment pond for treatment;
废弃液体物泄漏进入雨水管网时，立即将学校雨水总排口阀门关闭，将事故水池阀门打开，同时使用清水在前端将泄漏物冲洗到事故水池内收集，回流到校内废水处理池内处理；
- If the waste liquid is out of the school and enters the municipal pipe network or river due to heavy rain or out of control, immediately call the school management, district environmental protection bureau, and relevant government departments to request support and assistance; also use a submersible pump. Organize personnel to collect leaked material.
如果在户外，废弃液体物因遇到暴雨或失控状态下流出学校进入市政管网或河流时，立即电话通知校管理层、区环保局，以及相关政府部门等请求支援和协助；同时使用潜水泵组织人员对泄漏的物质进行收集。

5.2.3. Post-tracking 后期跟踪

- The cleaned up leaked substances are labeled or classified for storage;

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清理出来的泄漏物质张贴标签或归类存放；

- After collecting the wastewater generated by flushing the leakage, put a tag into the wastewater treatment station for treatment;
冲洗泄漏物产生的废水收集后，张贴标签进入废水处理站处理；
- Check whether all liquid waste is in the cofferdam or in the leakage prevention ditch to avoid similar phenomena;
检查所有液体废弃物是否在围堰内或防泄漏沟以内，避免发生类似现象；
- When liquid waste is stored in the open air, it needs to be kept tightly closed;
液体废弃物露天存放时，需密闭保存；
- Analyze and investigate the accident to prevent similar accidents from happening again.
对事故进行分析调查，避免同类事故再次发生。

5.3. Leakage of solid waste 固体废弃物泄漏

5.3.1. Report 报告

- When an emergency occurs, on-site personnel should immediately report to the school's EHS and regional leaders.
当发生紧急事故时，现场人员应立即报告校EHS及区域负责人。

5.3.2. On-site disposal and control 现场处置与控制

- Circumvent at the scene immediately to prevent unrelated personnel and vehicles from entering the leakage disposal area;
现场立即进行围避，防止无关人员和车辆进入泄露处置区域；
- When personnel arrive at the scene of a leakage accident, they should conduct a risk assessment and wear appropriate PPE protective equipment according to the nature of the leaked material
人员到达泄露事故现场后，应进行风险评估，根据泄露物质性质佩戴合适的PPE防护用品；
- For specific leakage disposal operations, please refer to the school's chemical spill emergency operation guidelines to contain and clean up the leakage;
具体泄露处置操作可参考学校化学品泄漏应急操作指引，将泄漏物进行围堵清理；
- Organize personnel to clean up and sort out leaked solid waste.
组织人员对泄漏的固体废弃物进行清理和整理。

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5.3.3. Post-tracking 后期跟踪

- Place solid waste in a designated safe area, effectively classify and stack it, and post waste labels;
将固体废弃物放置在指定的安全区域，并有效分类叠放，张贴废弃物标签；
- When storing in the open air, make sure to keep it in a sealed container and cover it with a rain cover;
露天存放时，需确保在密封的容器内，并在容器上加盖遮雨布；
- Analyze and investigate the accident to prevent similar accidents from happening again.
对事故进行分析调查，避免同类事故再次发生。

5.4. Leakage of dust and harmful gas 粉尘和有害气体泄漏

5.4.1. Report 报告

- Immediately stop the experiment or operation and report to the area leader and the school EHS.
立即停止实验或操作，报告区域负责人及校内EHS。
- If the concentration of dust and harmful gas is high, and the laboratory or teaching area is covered, the evacuation of nearby personnel should be organized.
如粉尘和有害气体浓度较高，且覆盖实验室或教学区域时，需组织附近人员疏散。

5.4.2. On-site disposal and control 现场处置与控制

- Personnel on the job site need to stop work and evacuate immediately;
作业现场的人员需要马上停止作业并撤离；
- If it involves gas or dust harmful to breathing, the handler should wear SCBA (air respirator) to the scene of the accident to confirm the leaked gas;
如涉及对呼吸有害的气体或粉尘时，处理人员应穿戴SCBA（空气呼吸器）到达事故现场，对泄漏气体进行确认；
- Determine whether the operation status of the gas discharge device in this area needs to continue and whether the electrical facilities on this floor (or the affected area) need to be cut off;
确定该区域内气体排放装置运行状态是否需要继续，该楼层（或受影响区域）电器设施是否需要切断；
- Turn on the emergency ventilation system at the leak site to reduce the harmful gas concentration;
在泄漏现场开启应急通风系统，降低有害气体浓度；

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- The staff of the EHS department used the instrument to detect the gas, and reported the results to the heads of various departments and schools.
EHS部门人员使用仪器对气体进行检测，并将结果报告各部门及学校负责人。

5.4.3. Post-tracking 后期跟踪

- Temporarily stop the operation of the abnormal organic waste gas device until its repair is completed;
对异常的有机废气装置暂时停止运行，直至完成其修复工作；
- Report the accident history and severity to relevant school management personnel;
将事故经过及严重性报告学校相关管理人员；
- Analyze and investigate accidents, and formulate corresponding control and prevention measures to prevent similar accidents from happening again.
对事故进行分析调查，制定相应的控制和预防措施，避免同类事故再次发生。

5.5. Wastewater treatment station leaks abnormally 废水处理站异常泄漏

5.5.1. Report 报告

- When a waste leakage emergency occurs, immediately stop the equipment operation and report to the equipment management person and the school EHS;
当发生废弃物泄露紧急事故时，立即停止设备运行，报告设备管理负责人和学校EHS；
- In the event of a major leak, the school management must also be reported.
发生大型泄漏时，需同时报告学校管理层。

5.5.2. On-site disposal and control 现场处置与控制

- Immediately close all operating facilities of the wastewater treatment station;
立即关闭废水处理站所有运行的设施；
- Emergency personnel must wear appropriate personal protective equipment;
应急处理人员必须佩戴合适的个人防护用品；
- Use anti-leakage tools and sand and anti-leakage cofferdams to prevent wastewater from entering rainwater and municipal pipe networks;
使用防泄漏工具和沙子、防泄露围堰防止废水进入雨水管网和市政管网等系统；
- Use the water pump to collect the leaked wastewater into the pre-precipitation tank of the wastewater treatment station for temporary storage or collection into a 1 ton emergency waste liquid collection plastic bucket;

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使用水泵将泄漏的废水收集到废水处理站预沉淀池内暂存或收集到1吨应急废液收集胶桶内；

- When the leaked wastewater enters the rainwater pipe network, immediately close the school rainwater main outlet valve to collect the leaked wastewater. At the same time, use clean water at the front end to flush the leakage into the accident pool for collection and return to the wastewater treatment tank for treatment;

泄漏废水进入雨水管网时，立即将学校雨水总排口阀门关闭，对泄露废水进行收集，同时使用清水在前端将泄漏物冲洗到事故水池内收集，回流到废水处理池内处理；

- At the same time use submersible pumps to organize personnel to collect leaked materials;同时使用潜水泵组织人员对泄漏的物质进行收集；
- When wastewater flows out of the school sewage pipe network into the municipal pipe network or river, the school management, the regional environmental protection bureau and other relevant government units should be notified immediately by phone to request support and assistance.

当废水流出学校污水管网进入市政管网或河流时，应立即电话通知学校管理层、区域环保局以及其他相关的政府单位等请求支援和协助。

5.5.3. Post-tracking 后期跟踪

- The cleaned up leaked material containers should be labeled with corresponding waste and disposed of in accordance with relevant national hazardous waste disposal requirements;清理出来的泄漏物质容器应张贴相应的废弃物标签，并按照国家相关危险废弃物处理要求进行处置；
- After the waste water from the leakage is collected, the container is labeled and discharged into the waste water treatment station for treatment;冲洗泄漏物产生的废水收集后，容器张贴标签，排放入废水处理站处理；
- Stop the operation of wastewater treatment equipment and repair the damaged wastewater treatment equipment or facilities;停止废水处理装置运作，对损坏的废水处理装置或设施进行修复；
- Report to the school management and relevant persons in charge, and determine whether it needs to report to the district environmental supervision department for record according to the situation;报告学校管理层及相关负责人，同时根据情况确定是否需要汇报至区环保监督部门进行备案；

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- Analyze and investigate accidents, and formulate corresponding control and prevention measures to prevent similar accidents from happening again.
 对事故进行分析调查，制定相应的控制和预防措施，避免同类事故再次发生。

6.0 Annex 附件

None 无