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File name **文件名**	**Chemical Leakage Response Instruction** **化学品泄漏处理指引**		

Approval process

审批过程

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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	2020-04-10	New file 新建文件
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03	2025-12-01	Regular renew 周期审阅更新

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 研究创新和研究生部	√	U.G. Dept. 本科教学部	√	I.T.Dept. 电脑信息部	√

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Relevant documents 相关文件

No 无

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1. Purpose 目的

Since a great deal of experimental material is stored in school. Once there is a leakage without handling timely, it will cause great harm to our environment and staff. Establish this procedure so that our field personnel can know how to conduct emergency response and reduce loss to the acceptable or minimum level.

校内含有大量的实验用原辅料，一旦化学品泄漏未得到及时处理会造成环境和人的极大伤害。制定此程序，使现场人员了解如何进行化学品泄漏应急处理，将损失降到最低限度。

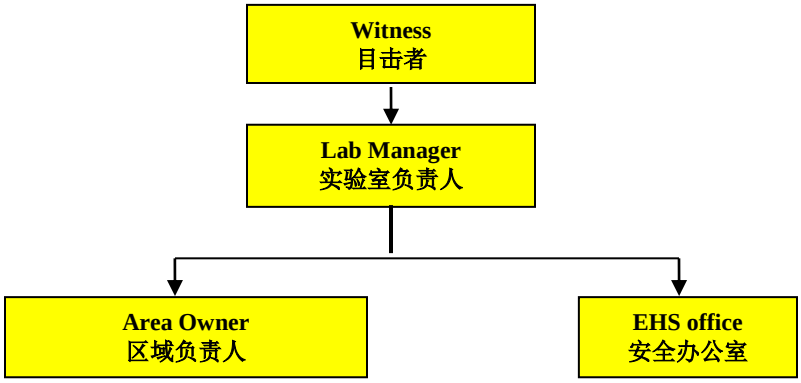
2. Scope 范围

Apply to all chemical's leakage in GTIIT.

适用于广东以色列理工学院内所有化学品泄漏。

3. Leakage Reporting Process and Content 泄漏事故汇报流程及内容

3.1 Reporting Process 汇报流程



3.2 Reporting Content 报告内容

Witness 目击者

Reporting content: Time/Location/Type of material/Cause of events

报告内容：时间/地点/物料类型/简单的事情经过

- Location where and when the event happened 发生地点和时间
- Type of the event and material 事故类型/物料类型
- Situation of personnel injury 人员受伤情况
- The name of reporter and contact way 报告人的姓名和联系方式
- If the leak is serious, the person may be affected should be informed 如是大面积泄漏，同时通知可能受影响区域的人员

Lab Manager 实验室负责人

Organize leakage disposal and report to the upper management immediately.

立即组织进行泄漏处理，并通报上一级管理层；

Upper management decided whether there is the need to ask for external rescue (Fire Alarm 119, First Aid Call 120, Police 110, etc.)

管理层同时视事故情况决定是否立即报警寻求外部求援 (消防 119，救护 120，公安 110 等)

4. Leakage disposal 物料泄漏应急处理

4.1. Leakage disposal procedure 泄漏处理步骤

1)Risk evaluation 风险评估

2)Select proper PPE 选择个人防护用品

3)Cut off the source of leakage 切断溢漏源

4)Leakage control 控制泄漏

5)Eliminate contamination 消除污染

6)Complete incident report 完成相关报告

- **Risk evaluation 评估风险**

When there is a leakage, handler should first evaluate its risk on the health of employees, environment and property. Make sure what the leakage is, according to the label or MSDS.

在发生泄漏时，处理者必须首先评估它对人员健康、环境及有形财产的危害程度。根据容器标签或 MSDS。

Evaluate the environment factors can affect the response, such as: illumination, wind direction, temperature, drain outlet etc.

了解周边环境的因素对事故处理的影响，如：照明，风向，温度，下水道口等等。

- **Select proper PPE 选择个人防护用品**

Select proper PPE: protective clothes, mask, gloves and boot, to have every part of body be protected.

使用合适的个人防护用品（PPE）至关重要，身体的每一个部位都应受到保护：套装、面罩、手套及长靴。

- **Cut off the source of leakage 切断溢漏源**

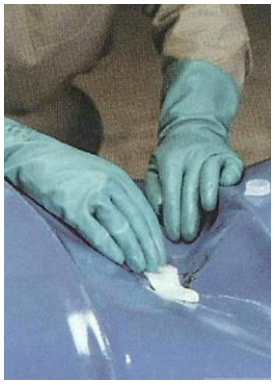
Once the leakage was controlled, please use one of the following three methods to control and stop the source of leakage: keep the container upright, close the valve or plug the source of leakage.

一旦控制了漏液，需采用如下三种方法之一锁定并阻止溢漏源：将容器保持直立，关闭阀门或塞住破损容器的溢漏口。

- **Leakage control 控制泄漏**

  Avoid the leakage flowing into the sewer to reduce the affected area and protect the drainage. Use suction bag and spill barrier to isolate the leakage. Select proper suction material to absorb the liquid to make sure the leakage can't be cleared completely.

  首要任务是：避免漏液接触水源，最大程度地减少溢漏面积，保护排水管道。用吸袋及吸栅围住漏液。用最合适的吸收材料来吸收液体，以确保清洁效果。



- **Leakage disposal 处理泄漏**

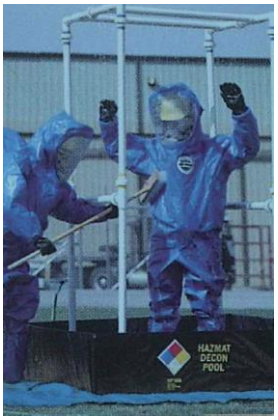
  Evaluate the leakage condition and use the best method to make the site clean. Use suction bag to absorb small quantity of leakage or the residual of large quantity of leakage. Vacuum cleaner or pump can be used to deal with the large quantity of stored liquid. The saturated suction material should be disposed of properly.

  评估溢漏状况，采用最佳措施来清洁。用吸垫来吸收小量的漏液或清除大量漏液的剩余部分。也可以用真空吸尘器吸出或用泵抽出较大量的盛装液体。已完全渗透的吸收材料应予以妥善处理。

- **Eliminate contamination 消除污染**

  The scene, apparatus and relevant personnel must be depurated after the clean-up.

  清洁操作完成后，请务必净化现场、设备及相关人员。



- **Complete the incident report 完成相关报告**

  The report must be completed immediately in 24 hours after the leakage happen.

  泄漏发生之后，应尽快完成泄漏事件下要求的所有通知及汇报工作.

4.2. Cautions when handling leakage material 泄漏化学品处理注意事项

- **PPE:**

  1. Emergency response personnel must use proper safety glasses and use protection masks, protective clothing and gloves when necessary;

  应急处理人员须根据现场情况使用合适的安全眼镜，必要时使用防护面罩，防护服及防护手套；

  2. When necessary, use proper respirator (when there is catalyst, MDI, etc., which is irritating to our respiratory tract or others that will do harm to our body through breath, respirator is a necessity)

  必要时须使用合适的呼吸防护器（如催化剂、MDI 等对呼吸道有刺激，甚至可以通过呼吸对人体造成伤害的物料,必须使用）。

  3. Select appropriate PPE according to MSDS.

  根据物料的安全数据表选择相应的个人防护措施。

- **Area control 区域控制：**

  When there is hazardous chemicals leakage, we need to control related area immediately. Evacuate all irrelevant personnel and isolate leakage area to prevent other personnel from entering.

如果是危险化学品泄漏需立即对区域进行控制，疏散区域内除应急处理人员外的所有无关人员，隔离泄漏区域防止人员入内。

- **Energy control 能源控制：**

  1. If there is a pipeline or tank leakage, we must control material supply source, cut off the source of leakage and stop the supply of energy, material, etc.

  如果管线泄漏，或者储罐破损导致的泄漏，必须对物料供应源进行控制、切断泄漏源，阻止能源、物料等的供应。

  2. If it is a metal drum, we can reverse it to let the leakage point upward and reduce the pressure of leakage point.

  如果是铁桶，可将铁桶倒转，使泄漏处向上，减少泄漏点的压力，使液位处于高处。

- **Ventilation 通风：**

  Ensure adequate ventilation to avoid the introduction of ignition source resulting in fire (if the material is flammable and explosive, the ventilation equipment must be intrinsically safe and explosion proof).

  确保充分通风/排气；防止引入点火源，导致泄漏物料着火（如果为易燃易爆物料，通风设备必须为本安型防爆风机）。

- **Containment of leakage 泄漏的围堵：**

  1. Put the leaking drum onto the spill containment pallet and use cofferdams and other tools to control the leakage area to the minimum. Collect the spill material to prevent it from spreading to the drain, sewer, water supply system, soil, etc.

  将泄漏的铁桶放置在防溢漏卡板上，使用围堰等工具将泄漏区域控制在最小范围内，收集溢出品，防止其扩散至排水沟、下水道、供水系统或土壤。

  2. If it is a small quantity of leakage, use proper absorbent material covering the spill to make sure that the spill material has been fully absorbed. Finally check whether there is residue left.

  少量泄漏时使用适当的吸收材料，覆盖泄漏物，充分使用吸附材料，直至完全去除，并检查是否有残留物；

  3. If there is a large quantity of leakage, we need to build a dike and bump the spill material to the tank truck or exclusive collector. Transfer the leak container directly for disposal.

  大量泄漏时须构筑围堤，用泵转移至槽车或专用收集器内，将泄漏容器直接转移，再进行处理。

- **Disposal of leakage material 泄漏物料的处理：**

  1. Prohibit pouring the leakage material into the sewer system;

  禁止将泄漏物料倾倒入排水管网；

  2. Use proper absorbent material, if necessary cover it with dry sand (it is forbidden to cover the explosive material with sand).

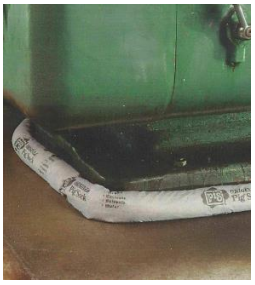
  使用合适的吸收材料，必要时使用干砂覆盖（易爆炸物料禁止使用砂子覆盖）。

  3. Damaged drum must be placed in the hazardous waste drum that is anti-UV and was molded with PE twice. Then we can put it into outside waste disposal area.

  破损废桶的储存必须放置在防 UV，聚乙烯两次注塑的危险废弃物桶内，方可放置在室外的废物处理区域。

5. Leakage disposal according to the storage method of liquid material

根据各类液体物料储存方式的相应泄漏处理方法



- **Suction bag 吸污袋**

  Place the suction bags around the base of leakage container in case that the leakage should reach the ground.

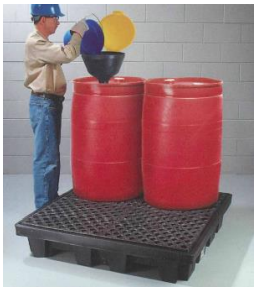
  将吸袋包裹在泄漏容器底座周围，防止漏液接触地板。

- **Universal suction pad 万用吸垫**

  Absorb the leakage to keep the floor clean and wet.

  吸收杂乱的滴液及喷液，使地板保持清洁干燥。

- **Spill tray 防溢盛装托盘**



Keep the storage area of drums clean in order to collect the leakage.

保持圆桶存放区干净整洁，同时将滴漏、溢漏和泼溅液体盛装起来。

6. Waste handling 废物处理

The handling of the waste during the leakage disposal sees to “Lab Waste Liquid Collection and Transfer Instruction”.

堵漏过程中所产生废物的处理方式参见”实验室废液收集转运指引”。

7. Appendix: Hazardous Liquid Material in Lab

附录：实验室内危险液体物料