



## Evaluation of Environmental Aspects VAIL-EHS-070

Affected Departments	
ALL	

	Role	Date
<b>Originator</b>	EH&S Manager	10 Dec 2020
<b>Reviewer</b>	EH&S Advisor	10 Dec 2020
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ISSUE/REV NUMBER	SUMMARY OF UPDATE	DATE INCORPORATED
1.0	Initial Issue	17/02/2020
1.1	Minor format changes	10 Dec 2020

List of Abbreviations	
ISO14001	Environmental Management System
EH&S	Environment, Health & Safety

Reference Documents	

Forms	
VAIL-EHS-070LT01	Site Environmental Impacts Register
VAIL-EHS-070F01	Environmental Impact Assessment

## 1. Purpose

- 1.1. It is a requirement of the ISO14001:2015 Environmental Management System that VAIL shall establish and maintain a process whereby all the elements of its activities, products and services that can interact with the environment (known as aspects) can be identified and assessed for significance.

## **2. Scope**

- 2.1. The aspects and impacts register covers all reasonably perceivable environmental risks at all VAIL sites.

## **3. Responsibility**

### **3.1. All Work Areas**

- 3.1.1. All work areas shall consider environmental aspects being introduced as a result of any new activity to be undertaken within the area or by the team. Any member of the work area team, providing he/she has adequate knowledge of the activity, shall work in conjunction with the EH&S department to determine the potential environmental impact of each aspect identified. Upon completion of this identification process, the EH&S department shall add each arising to the environmental aspects and impacts register contained in this procedure.

### **3.2. EH&S Department**

- 3.2.1. Use the procedure detailed below, "Determination of Significance of Environmental Impact", to determine the significance of the Environmental impact of the activity. The result of this determination applicable both to routine operation and to emergency operation, shall then be included in the Register of Environmental Impacts.
- 3.2.2. On an annual basis, the EH&S department shall review the Register of Environmental Impacts. The aim of the review is to ensure that the register is up to date. It shall take into account any changes to legislation, work activities or practices.

#### 4. Action

##### 4.1. Determination of Significance of Environmental Impact

- 4.1.1. The following methodology shall be used so that it is possible to identify significant Environmental impacts. The following system will be used to rate Environmental impacts and provide a way in which to prioritise their significance and importance for corrective actions.
- 4.1.2. This will be carried out using a tool well used and tested in Health and Safety risk assessments. Environmental Risk Assessments on the Impacts of our operations are carried out using these tools with some differences.
- 4.1.3. **Probability** – of a significant Environmental impact occurring, for example, the failure of existing physical or procedural controls to contain emissions or compliance with legislation. A rating value of 1 to 6 is given depending on the probability of occurrence. That is 1 for highly unlikely, 6 for certain.

###### 4.1.3.1. Risk Scoring for Probability

Probability of a Significant Environmental Impact	Score
Certain	6
Highly Likely	5
Likely	4
Possible	3
Unlikely	2
Highly Unlikely	1

4.1.4. **Consequences** – of a potential Environmental impact, for example, physical Environmental impacts, constraints on operational capability of the establishment, costs and public relations. Again, a rating value of between 1 and 6 is given depending on the seriousness of the consequences.

4.1.4.1. Risk Scoring for Consequence

Potential Consequence	Score
Major pollution of a sensitive receptor, on site remediation cost or civil liabilities for off site remediation costs or damages	6
Pollution of any receptor, probable on site remediation costs	5
May attract the attention / adverse comment from the media or the public OR pollution incidents, which may give rise to remediation costs or nuisance complaints	4
Emissions which may contaminate the site drainage systems, or land and which may involve remediation costs but would be unlikely to attract nuisance complaints, civil liabilities or adverse publicity	3
Emissions, which may cause pollution on the site but would not involve remediation costs and would have only short term (e.g. 4 weeks) environmental impact	2
Emissions with effects that carry no direct financial liability but, which still require the application of controls (e.g. vehicle emission controls)	1

**4.1.5. Resultant Impacts** – any material or process has the potential to pollute the environment. It is essential therefore, that any pollutant can be detected as quickly as possible before it causes a pollution incident and a resultant environmental impact.

4.1.5.1. A further risk factor is therefore applied depending on the “resultant impact”. This is a numerical value of between 1 and 6. A pollutant which would have an insignificant impact on the environment would be given a score of 1, while a pollutant which would have a significant impact on the environment would be given a score of 6.

4.1.5.2. Resultant Impact Risk Scoring

Resultant Impact	Score
Extensive impact resulting from an emergency condition, which potentially could have actual impacts on the environment such as: 1. Adverse effect on human, animal and plant health. 2. Land contamination. 3. Water pollution by hexavalent or total chromium and/or cyanide, zinc, cadmium, nickel and copper. 4. Harmful air emissions	6
Severe impact resulting from an emergency or abnormal condition, which potentially could have actual impacts on the environment such as: 1. Adverse effect on human, animal and plant health. 2. Land contamination. 3. Water pollution by hexavalent or total chromium and/or cyanide, zinc, cadmium, nickel and copper. 4. Harmful air emissions	5
Moderate / severe impact resulting from an abnormal condition which potentially could have actual impacts on the environment such as: 1. Adverse effect on human, animal and plant health. 2. Land contamination. 3. Water pollution by hexavalent or total chromium and/or cyanide, zinc, cadmium, nickel and copper. 4. Harmful air emissions	4
Small / moderate impact resulting from an abnormal or normal condition which potentially could have actual impacts on the environment such as: 1. Land contamination. 2. Air emissions (under emergency conditions). 3. Noise pollution. 4. Water pollution (waste oils). 5. Conservation of natural resources. 4. Visual impact (litter)	3
Very small impact resulting from a normal condition which potentially could have actual impacts on the environment such as: 1. Waste production. 2. Noise generation. 3. Conservation of natural resources. 4. Use of resources. 5. Visual impact (litter)	2

Negligible or no impact resulting from a normal condition which potentially could have actual impacts on the environment such as: 1. Waste production. 2. Noise generation. 3. Conservation of natural resources. 4. Use of resources	1
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4.1.6. **Legislative and Legal Consequence** – any processes which are controlled by or may breach legislative requirements if an incident occurs and could result in litigation or reparation costs are to automatically be deemed “significant”.

#### 4.1.6.1 Legal Consequences Risk Scoring

Legal Consequences	Score
A legal consequence which could result in a breach of legislation (statutes, regulations) under normal operating conditions and has had a history of past breaches of legislation and would also involve high remediation costs and possible litigation for damages	6
A legal consequence which could result in a breach of legislation (statutes, regulations) under abnormal conditions and has had a history of past breaches of legislation and would also involve high remediation costs and possible litigation for damages	5
A legal consequence where the activity has an impact under normal operating conditions but could result in a breach of legislation under abnormal conditions and has had no previous breach of legislation but would involve high remediation costs and possible litigation for damages	4
A legal consequence, which could result in a breach of legislation (statutes, regulations) under abnormal conditions and could also result in a breach of policy under normal conditions	3
A legal consequence where emergencies would cause a breach of legislation (statutes, regulations) but could also result in a breach of policy or procedures under abnormal conditions	2
A legal consequence whereby emergencies would cause a breach of policy but no breach of legislation	1

4.1.7. **Overall Risk Rating** – to obtain the overall risk rating for an Environmental impact, the following calculation is carried out:

4.1.7.1. Using the following formula  $A \times B \times C \times D = \text{Overall Risk Rating}$ .

A = The probability risk score

B = The consequence risk score

C = The resultant impact risk score

D = The legal consequences risk score

e.g. A process has a probability score of 5, a consequence score of 4, a resultant impact score of 4 and a legal consequence score of 4.

Overall Risk Rating  $5 \times 4 \times 4 \times 4 = 320$

4.1.8. The overall risk rating value must be recorded on the Environment Impacts Register. The higher the rating the more important and higher priority the corrective actions must be given.

4.1.8.1. Guide to overall risk rating figures

Rating	Score (Approx. Values)
INSIGNIFICANT	0 – 299
SIGNIFICANT	300 AND ABOVE